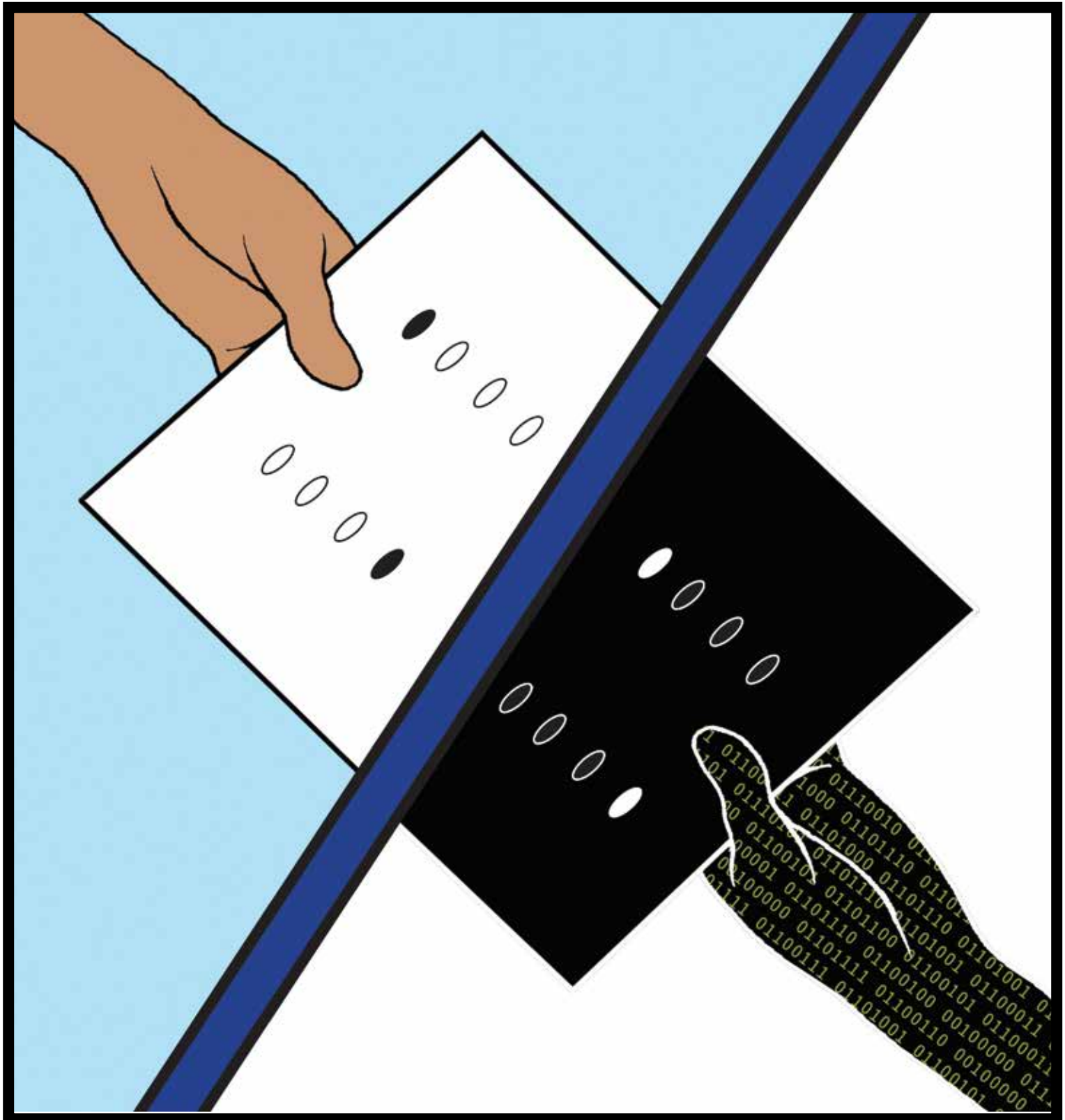


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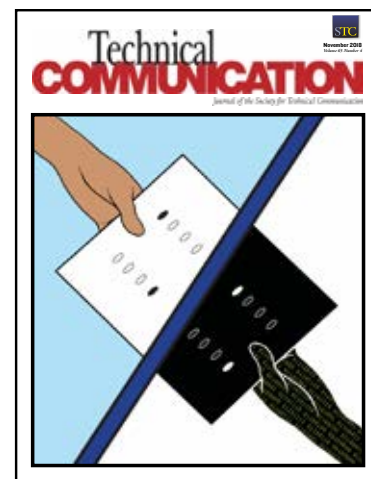
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Technical Communication is a peer-reviewed, quarterly journal published by the Society for Technical Communication (STC). It is aimed at an audience of technical communication practitioners and academics. The journal's goal is to contribute to the body of knowledge of the field of technical communication from a multidisciplinary perspective, with special emphasis on the combination of academic rigor and practical relevance.

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Isidore Dorpenyo and Godwin Agboka

# Election Technologies, Technical Communication, and Civic Engagement



Technologies have become integral to the conduct of elections globally—and this is the case particularly in many developing democracies where there is an increasing focus on electoral integrity and the legitimacy of election candidates and eventual winners. In the developing world, for example, sites such as Somaliland are leading the way in adopting technologies to facilitate ease and security of voting and vote counting. Data released by the Institute for Democracy and Electoral Assistance (IDEA) suggest that only about 11% of countries conduct elections without using some form of technology (Wolf, 2017). Around some 57% of countries use technologies for vote counting, while about 71% of election management bodies use various technologies for election-related registration activities. Of course, this also comes with some challenges, as is crystallized by the annulment of the 2017 presidential results in Kenya as a result of “irregularities” and “illegalities” in the transmission of results from polling stations. Other cases in Ghana and the United States, among others, further reinforce the problems that are associated with technology adoption and use. Increasingly, election technologies have become scarily vulnerable to breakdown, malfunction, and hacking, raising several implications

about electoral integrity—and becoming an important site for research and scholarly inquiry.

When we use the term “election technologies” in this special issue, we are not merely suggesting the physical equipment with or on which votes are cast and counted. More broadly, we refer to “every piece of hardware and software that is used by local election officials throughout the process of administering elections, from registering voters to conducting post-election audits. And the connection between that technology and the humans who use it—voters and election officials—is key” (“Elections Technology Toolkit,” para. 1). Ultimately, we are more concerned about the socio-cultural factors that influence technology use, particularly how humans interface with all forms of technologies that shape the outcome of elections. Scholarship on technologies, their use, and adoption is replete with enough information about the problems associated with the value-neutrality view of technologies. When used in a social context, technologies are invested with values, politics, and suspicions that may raise many issues for all stakeholders and which may further complicate electoral decisions.

Disciplines such as political science and computer science have long engaged many of these

issues, but the field of technical and professional communication (TPC) is yet to keep pace with this research—although it is well positioned to address these issues as a result of the obvious connections between TPC and issues of technology, public discourses, civic engagement, and politics. Over the years, TPC scholars have effectively highlighted ways in which technologies either facilitate communication or affect society (Banks, 2005; Hayhoe & Grady, 2009; Sun, 2012), but little scholarship has looked at ways in which technologies (broadly defined to include paper ballots, voter registration, voter education materials, Internet technologies, scanners, ballot printing materials, user manuals and other technical documents used during elections) shape the conduct and/or outcomes of elections. Whitney (2013) demonstrated how technical communicators can contribute to electoral issues when she critically studied the 2010 Citizens Clean Elections Voter Education Guide designed with the purpose of providing the Arizona voting public with the needed information about state elections. She concluded that technical communicators have a role in helping electorates to understand how personal political gains shape how information

is communicated, including how technical communication constructs “a perceived identity of certain groups of people and influences the reactions that other groups have to them” (p. 451). More so, Dorpenyo’s (2016) work on biometric machines used in the 2012 Ghana elections also points to ways in which technical communicators have vital roles to play in technology adoption during elections, especially in unenfranchised sites. Essentially, issues about technologies and their deployment or use in elections raise important usability and social justice questions for both designers and users of such technologies, especially in unenfranchised cultural sites. We believe that technical communicators have important roles to play in this conversation because of our long standing conversations on technology and social justice (Agboka, 2013; Jones, 2016a, 2016b; Rose, 2016); technology, race, and access (Banks, 2005; Haas, 2012; Seigel, 2013); technology and human rights (Walton, 2016); and technology and ethics (Katz, 1992).

Election matters, central to which are technologies, also crystallize how TPC can contribute to democratic discourse and civic engagement. If technologies raise concerns about integrity, social justice, usability, and human rights, technical communicators can play a mediating role in how people interface with technologies and/or how they can effectively use these technologies to accomplish their civic, political, or democratic goals. Doing this can offer perspectives

about ways in which we can prepare our students to pursue the public good. In his guest editor introduction to the special issue of *Technical Communication Quarterly* devoted to civic engagement and technical communication, for example, Dubinsky (2004) charges TPC scholars to prepare students to be able to “exercise political power by pursuing goals concerned with ‘human life and conduct’” (p. 245). Also, all the scholars who contributed to that issue identified the varied roles technical communicators play in the public sphere. To be sure, Bowdon (2004), writing in “Technical Communication and the Role of the Public Intellectual,” tells a story of her involvement with a local AIDS prevention program to exemplify how technical communicators can act as public intellectuals. She argues that with our understanding of language as an ideological paradigm and genres as socially and politically situated, we can contribute responsibly in the public sphere by bringing our “specialized knowledge to serve as a liaison” (p. 329) among stakeholders in our communities. Though she was only invited to this AIDS project as an editor of technical documents, she realized that she was involved with something larger than “just editing.” Through the narration of her participation in this project, she helps us to understand that as public intellectuals, the onus lies on us to “make our work part of the public sphere;” “recognize the democratic functions of our work as educators;” “create positive changes in our communities by recognizing kairotic moments for intervention;”

and “recognize our own situatedness within work contexts” (pp. 325–326). It is necessary to expose students to ways in which they can initiate local action to effect changes in their communities (p. 326). Elsewhere, the recent collection edited by Agboka and Matveeva (2018) reinforces the civic role of technical communicators by emphasizing how TPC scholars are already engaged in improving the lives of individuals in local, global communities.

This special issue demonstrates that as technical communicators, we can help find some answers to the problems we encounter in our societies (p. 66). We need to apply our “specialized knowledge” in service of community (Bowdon, 2004, p. 329). The articles assembled in this special issue take up all these issues highlighted in this introduction. There are five articles in this special issue. Each of these articles complicates our traditional notions of a technology and discusses ways in which such a technology may be used to advance or inhibit electoral outcomes/integrity.

Writing in “Racial Gerrymandering and Geographic Information Software: Subverting the 2011 Texas District Map with Election Technologies,” Fernando Sánchez positions electoral maps and legal policies as technologies, and discusses how mapmakers in Texas subverted language from the Voting Rights Act in order to produce a visual document (the redistricted map) that mitigated the voting powers of Latin@ constituencies. Drawing specifically from the 2017 Texas court case



involving the 2011 district map involving districts 27 and 35, he points to how race and ethnicity are impacted by the legislative and mapping technologies that shape our elections. Sánchez admonishes technical communication scholars to move beyond compliance and instead constantly aim for promoting equity in their work.

Still on the theme of race and social justice, Natasha Jones and Miriam Williams also highlight how types of technical communication (such as forms, manuals, reports, etc.) can be used to consciously disenfranchise voters or preserve and maintain oppressive power structures. Specifically, they show how historical documents such as literacy tests and voter registration applications were administered to Blacks from the 1890's to 1965 to intentionally confuse and prohibit them from voting in U.S. elections. Through their analysis of these forms, the authors prove that forms, as innocuous as they may appear, are not always designed with good faith or good will in mind. Instead, some technical communication documents can be used and have been used to uphold oppressive power structures and implement harmful and oppressive practices. They therefore recommend that technical communicators “consider not only what technologies and text are designed to do, but how they are actually used in practice, and how to identify the opportunities, places, and obligations to intervene.”

Jennifer Sano-Franchini examines Facebook as a technology and how its UX/interface design has contributed to user engagements that have implications for the

current political context within which we live and work. She particularly discusses the ideological, political, and epistemological implications of the interface design, with a focus on how Facebook's user interface creates spatiotemporal realities and mediated intimacies that shape user experience (UX), as well as how it encourages particular forms of engagement while discouraging others. She ultimately opens up possibilities for more democratic, culturally reflexive technologies for disseminating a wide range of political and election-related information while also highlighting how user politics are in large part shaped by digitally networked and mediated intimacies.

In “Bitcoin, Blockchain, and Ballots: Technical Communication and Trust in Electoral Systems,” Jim Nugent takes on questions of trust, voter confidence, and election technologies. He investigates these by providing an overview of some of the principles of election integrity and by discussing some of the implications of emerging digital technologies for building trustworthy election systems. A key component of his discussion is the “blockchain” technology, which he explains as the technology that enables the online cryptocurrency Bitcoin and examines its potential as a voting technology. Nugent demonstrates the possibilities and challenges that technologies like blockchain might bring to election systems, as well as what insights they may provide into transparency and trust as operative principles in elections more generally.

Similarly, Matthew Bridgewater discusses how election technologies

imbue office holders with legitimacy. Specifically, he examines how elections technology company websites establish ethos, trust, and public confidence with their audiences. Bridgewater argues that while elections technology companies rely on strategies such as appealing to expertise and American history and patriotism, they often frame company ethos using the rhetorics of business profitability and the efficiency and impartial good of technology, aligning these rhetorics with the goals of democracy to legitimate the voting process. His work suggests that elections technology companies create public confidence and trust by showing their commitment to democracy through not just traditional appeals to expertise, or to traditional American tropes, but through the ethos and rhetoric of business and technology.

In many ways, TPC scholars are aspiring to become what Johnson (1998) refers to as “participatory citizens.” If we consider ourselves as citizens who have to participate in the affairs of a larger society, then, we will be able to carry the knowledge we acquire into the political arena, the space created for decision making. In the political arena, Johnson states, we are invited to participate and we, in return, should respond to the call of participation by contributing to the common “good of the community.”

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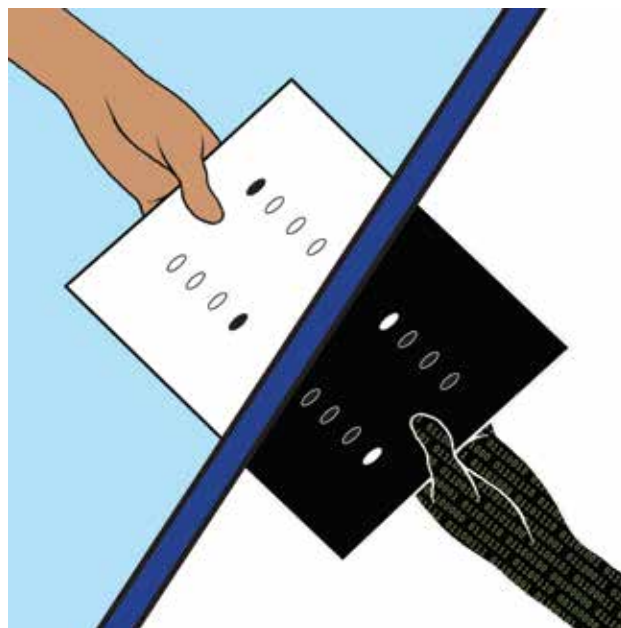
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## On the Cover



This simple cover design is inspired by the deceptively simple technology of paper ballots. A 2017 article by Dan Gillmor in *The Atlantic* laments the use of electronic voting machines that leave “no tangible evidence” of a person’s vote. From this perspective of election technologies, electronic ballots are mysterious and abstract, but paper ballots, which can be held in hand, are clear and real. This perspective removes the role of the human from the design and operation of the electronic ballot but also removes the role of technology from the production and collection of paper ballots.

This cover design inverts oversimplified notions of the role of humans and technologies in casting votes. To submit a paper ballot is to transmit data using technology designed and operated by humans. In the one visually complex element of the cover design, the hand that receives the inverted ballot is composed of binary code, yet it takes the shape and size of the hand that cast the vote. Despite the ballot itself being devoid of text, the influence of technical communication is implied throughout, from the standardized design of the ballot to the user experience of casting votes to the digital reception and translation of the ballot. Even with the “tangible” paper ballot, the risk of interference or miscommunication persists.

### About the Artist

**Rachael Graham Lussos** is a PhD candidate in Writing and Rhetoric at George Mason University (GMU). She teaches professional writing workshops to government and private sector organizations, and, as an independent consultant, provides technical communication services, such as editing, document design, and proposal writing. She is the founding president of the GMU STC student chapter. She is available at [rachael.k.graham@gmail.com](mailto:rachael.k.graham@gmail.com).

# Racial Gerrymandering and Geographic Information Systems: Subverting the 2011 Texas District Map with Election Technologies

By Fernando Sánchez

## Abstract

**Purpose:** This research contributes to the scholarship in technical communication on race by furthering work regarding latinidad and technical documentation.

**Method:** This article looks specifically at the 2017 Texas court case involving the 2011 district map involving districts 23 and 35. The article also analyzes the methods with which legislative mapmakers operate and deploy GIS software.

**Results:** As previous researchers have noted, latinidad is often constructed in political and governmental documents within the United States to position Latinos as a threat to White Americans. Frequently, this constructed threat is mitigated by inflating the contributions of White Americans over their Latino counterparts. Yet, this examination of the 2017 court case illustrates that mapmakers can also utilize Geographic Information Systems to gerrymander districts and thus suppress Latino's voting power to help White Americans maintain political power. Most worrisome is mapmakers' deference to and citation of the Voting Rights Act to justify the creation of districts that account for and control electoral agency.

**Conclusion:** The article concludes by asserting that technical communicators move beyond compliance in order to account for multicultural publics and to avoid engaging in similar technological practices. It also encourages technical communicators to become more active in identifying practices that threaten democratic integrity and in using their skills to promote more socially equitable electoral practices across their teaching, research, and advocacy.

**Keywords:** gerrymandering, Geographic Information Systems (GIS), minority publics, maps, visual rhetoric

## Practitioner's Takeaway:

- GIS software aids legislative mapmakers in learning more about a community or district. However, this technology can be used to make assumptions about district residents' cultural heritage.
- Language meant to make material conditions more equitable for minorities can be subverted to shore up resources for people in power. We must be careful to examine how the documents, policies, and technologies that we help to craft are being utilized after they are disseminated.
- District maps move beyond simply influencing our perceptions of a place; rather, they contain substantial material consequences.
- Technical communicators can use their skills in visual rhetoric and argumentation to identify manipulative visual rhetoric and to advocate for fair electoral processes for all residents.



## Introduction

In the introduction to *Communicating Race and Ethnicity in Technical Communication*, Williams (2014) argues that technical communication has lagged behind other related fields of English, such as rhetoric and composition or literary studies, in highlighting how race and ethnicity inform our discipline. This aversion is not due to any lack of connection between race and the communication of scientific, technological, or workplace information. Indeed, they share a long (and problematic) history. Technical documents on how to purchase and manage slaves (Ramey, 2014), medical studies that unethically use black bodies for research (Reverby, 2009), and perennial attempts to connect race to genetics (Condit, 2010) all show that science, technology, and workplace communication are often implicated with race due to social and cultural forces.

Recently, however, we have seen more of this important work on race and ethnicity playing a larger role in technical communication scholarship regarding research (Richardson, 2014; Williams, 2012), practice (Shivers-McNair & San Diego, 2017), and pedagogy (Savage & Mattson, 2011; Haas, 2012). Such work helps to bring to the fore experiences of diverse publics not only in the uses and access of technology but also in how racial and ethnic groups are represented in technical documentation.

To illustrate, Banks (2006) argues that, due to their exclusion from communication technologies, African Americans have historically developed tactical modes and practices of engaging in and with discussions about technology in order to advocate for inclusive access to systems of power (p. 2). Most pertinent to my project is Banks' assertion that "the conventions of legal scholarship and jurisprudence provide an example of how language itself can be technologized" (p. 9) to limit African American participation within American voting and legal systems. Such "technologization" of legislative language makes itself evident through various forms: "constant gerrymandering... to dilute Black voting blocs; three strikes laws...; absurd differences in drug sentencing laws...; Proposition 209's elimination of affirmative action programs" (p. 86). Similarly, Williams (2006) has noted that the language in government regulations have historically carried elements of

distrust, deception, and disparity for racial groups. Taken together, if we see legislative documentation as technologized language with—like all technologies—limited access to only certain individuals, then we must tackle these seemingly closed off systems precisely because they carry such important weight for racially and ethnically diverse communities.

In this article, I expand on Banks' (2006) and Williams' (2006) respective discussions of legal and electoral processes by focusing on how maps and legal policies act as technologies that have been subverted to disenfranchise racial and ethnic minority voters in elections. Specifically, I analyze how legislative mapmakers in Texas subverted language from the Voting Rights Act in order to produce a visual document (the redistricted map) that mitigated the voting powers of Latino constituencies. This study, then, adds to the recent work that has been published on *latinidad* in technical communication and connects it to theories of mapping communication practices.

## Latino Constituencies in Political Documentation

Within the last decade, there has been a growing body of work within the field that pays attention to the representation of and engagement with Latino publics. Such scholarship has argued for more attention to localized practices and languages of Hispanic communities to create documents that are usable to individuals from such cultural backgrounds (Evia & Patriarca, 2012; Danuz, 2014; Cárdenas & Kirklighter, 2014), highlighted the representation of Latino publics within business and technical documentation (Pimentel & Gutierrez, 2014; Johnson, Pimentel, & Pimentel, 2008), and focused on Latino students' cultural and linguistic backgrounds in technical communication courses (Medina, 2014; Fredericksen, 2004).

With regard to legal and government documents, research has suggested that *latinidad* has historically been mis-constructed in political discourse in the United States in order to continually "other" Latino individuals and culture—thus making it easier for Anglo Americans to dismiss or fear them. As Johnson, Pimentel, and Pimentel (2008) argue, in the late 1800s, the New Mexico Bureau of Immigration created brochures and other documents to bring more White Americans into the state (and decrease



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the political power that local Mexicans would have). These documents shrewdly omit the accomplishments and stories of indigenous and Latino peoples, instead promoting and exaggerating White conquistadores' perspectives. As importantly, these documents inflated the White population by "counting" certain groups of people as White in certain circumstances but not in others, thereby "making New Mexico more appealing to [an] intended White immigrant audience" (p. 228).

This logic of "double counting" populations in the United States with regard to census numbers still remains in practice today. As Pimentel and Balzhiser (2012) elaborate, the U.S. Census' treatment and conceptualization of Hispanics forces them to "choose a racial category that does not represent their racial identity" (p. 319). In effect, census takers must identify if they are Hispanic, Latino, or Spanish; afterward, they are asked to select their race from among a variety of options (Black, White, American Indian, Chinese, Korean, etc.). The problem here, as Pimentel and Balzhiser elaborate on, is that Mexican, Cuban, Hispanic, Latino, or other racial identity labels do not appear. Rather, Hispanic and Latino are considered to be ethnic markers, leaving nearly half of Latinos to mark "some other race" as their race. The designers of the census believe that Hispanics and Latinos should mark themselves as racially White or Black; but such categorizing does not take into account how Latinos self-identify. As a result, when population statistics are tabulated, *latinidad* is read twice: once from the Hispanic ethnicity numbers, which "serves to monitor the perceived power threat that results from the changing demographics of Hispanics in this country" and again folded into the White racial category "which serves to inflate the white count" (p. 334). In effect, counting Hispanics as a White race continues this history of whitewashing the cultural differences of Latino populations within the United States that Johnson, Pimentel, and Pimentel (2008) refer to in the New Mexico documents. Essentially, the placement of the Hispanic-origin question constructs Hispanics "as a nonwhite group that increasingly competes for material resources, government representation, and otherwise political power with an imagined non-Hispanic white group" (p. 344). Such constructions perpetuate the fears that White Americans might have about racialized "others" infringing on what is theirs.

Indeed, we can see this continued political portrayal of Latinos as threats to Anglo Americans in Whitney's (2013) analysis of Arizona's 2010 Citizens Clean Elections Voter Education Guide. The voter guide was meant to provide a snapshot for Arizonans on where candidates stand on certain political issues. That many candidates syntactically coupled "illegal immigration" with second amendment rights (or "the right to bear arms") in their position statements is significant given that, as Whitney points out, such a connection simultaneously conjures up associations with political freedoms as detailed in the constitution and, at the same time, creates a threat to those freedoms via illegal (mostly Mexican) immigrants. As alarmingly, the means of securing those freedoms against such threats are presented in this very association as well. Because undocumented immigrants are painted as dangerous criminals, putting them in the same sentence as protecting second amendment freedoms also conjures up a solution to the problem—through gun violence against Mexicans (Whitney, 2013, p. 450).

I discuss these studies to make clear how the construction of *latinidad* has continued to be a problem within the creation of political documentation. As I will show, Latino publics face a larger challenge via the election technologies (textual and technological) which are put in place to count their votes. In the following section, I discuss the process of redistricting, explain how that process has the potential to create gerrymandered districts, and link these discussions to work in technical communication on mapping.

### Redistricting and Gerrymandering as Mapping Technologies

Since the 1960s, redistricting has been a common and regular activity undertaken every decade by legislators in the United States to better align government representation with population. That is, lawmakers need to know whether states should develop new or merge existing districts in accordance with population ebbs and flows. This is seemingly a process that is meant to facilitate fair democratic engagement.

Most of the discussions in the United States regarding the stakes for redistricting, however, did not begin until the 1960s. Prior to that, seats in the House were allocated based mostly on best guesses. However, as unstable imbalances among districts grew more

severe<sup>1</sup>, the Supreme Court was forced to intervene and ruled that such practices violated the 14<sup>th</sup> Amendment's protection of equal representation (p. 33). Since then, the task of remapping a state's districts has become perfunctory and often contentious, in part because federal tax dollars are apportioned based on census data (Schuurman, 2004, pp. 54–55). This has meant that lawmakers have become fixated on obtaining accurate data on where people in the United States reside.

Although paper maps and census data were once sufficient to engage in these districting practices, legislative mapmakers now rely on Geographic Information System (GIS) technologies to pinpoint the shape and design of districts based on specific demographic data. We can think of GIS software as a digital version of tracing paper. If we envision a map of a county or a district, that map can be overlaid with several different layers. One layer can show zoning information—which blocks and parcels of land should be utilized for commercial or residential or mixed use. Another overlay can be layered on top to showcase the last known number of residents living in these buildings. Yet another could be placed on top to give information that is relevant about the land beneath the streets—elevation, sediment type, sewer networks, etc. These can be seen one at a time or overlaid on top of one another for a complex view of a district. As Kennedy (2013) describes, GIS “makes possible the acquisition and storage of geographical and related attribute data, for purposes of retrieval, analysis, synthesis, and display to promote understanding and assist decision making” (pp. 4–5). With the proper data on the information that is on the ground, experts in a wide range of industries can utilize GIS to aid in planning, consolidating and conserving natural resources, documenting crime and allocating proper resources, as well as facilitating new and more efficient transit options (Kennedy, 2013, pp. 10–11). Moreover, GIS can render data visually, producing maps that immediately make visible such hidden issues as health disparities (Cromley & McLafferty, 2012), residential CO2 emissions in urban areas (Wadhwa, 2010, p. 34), helicopter pilots' aviation routes (Zouabi, 2010, pp. 48–49), and storm surge inundation zones (Degelia, 2010, pp. 62–63).

I stress, however, that people create these maps for specific purposes, and that these maps are created with numerical data regarding, for example, the demographics of a population surveyed by a pollster or the soil readings collected by a geologist. This data can be made public to allow for aggregation of information, creating richer, more complex data sets (Cromley & McLafferty, 2012, pp. 108–110). In other cases, analyses of the data can be uploaded to various places online. Esri, a GIS software platform, provides a space for researchers and government entities to upload their maps for public dissemination. For example, the city of Minneapolis, MN publishes GIS content on their official Esri account. One of their maps, “City Council Wards with Demographics,” showcases the 13 wards in Minneapolis and, when one hovers over them, a pop-up window appears, containing information on population numbers and median age derived from the latest census information. In other words, this data is packaged together in order to develop a richer narrative of a ward. More importantly, I can take that packaged map and overlay it on top of a number of other previously compiled maps (or use my own data set to create a new map). For example, I can combine the Minneapolis wards map with Esri's (2017) USA Education Spending map from 2016 that “shows the average amount spent on education per household in the US” on a scale from \$0 to \$9,220, as derived from “Average annual amount spent on education per household; Average annual spending per household for tuition by education level; [and] Average annual spending per household for additional school necessities [sic]”.<sup>2</sup> After overlaying them, I can click on my ward and see that there are 39,000 people living here, with a median age of 39, and that the average household spending for education is approximately \$1,652 per year in my area. Additionally, I can overlay another map on average household income as well, and so forth, until I have as complete a picture of my neighborhood as the data will allow.

Not surprisingly, as the example above shows, legislative mapmakers most frequently derive data to create redistricted maps from the U.S. Census; this data allows them to trace where people live, how many people live there, and demographics about those residents (age, race, income). And although

<sup>1</sup> To illustrate, Los Angeles County in California had one senator representing six million people while a rural district had only 14,000 residents (Bullock, 2010, p. 33).

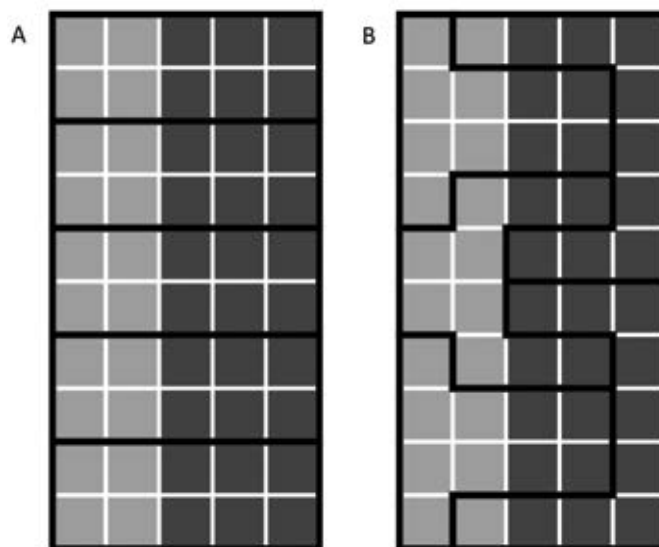
<sup>2</sup> Esri's statements on their methodology for data collection and analysis can be found here: [https://www.esri.com/data/esri\\_data/methodology-statements](https://www.esri.com/data/esri_data/methodology-statements)

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legislative mapmakers can also overlay information from voter databases on top of the census data in order to create districts that are more competitive, this process is frequently abused in order to make them less competitive. That is, mapmakers can use the data to trace contorted boundaries that purposefully leave people outside of their boundaries to better control the outcomes of their congressional races. This process of redrawing districts specifically to give one political party advantage over another is referred to as “gerrymandering.” Although the practice of reconfiguring districts to favor one political group over another can be traced back to Pennsylvania in 1705 (Griffith, 1907, pp. 26–27), the actual term “gerrymander” comes from 1812 when then-governor of Massachusetts, Elbridge Gerry, redistricted the northern parts of Essex County in an attempt to win re-election. Critics who saw through this attempt mockingly referred to the new district as a “Gerrymander,” a portmanteau of Gerry and salamander, for its elongated, curved shape.

Figure 1 provides an example that helps visualize the ease with which voting districts can be manipulated (adapted from Nass, 2015). Figure 1A shows five districts, each with 10 square “precincts”. Assuming that in every district 4 of those precincts regularly vote one way (light grey) and 6 another (dark grey), we can predict that the dark grey option would win every district, and thus the election. However, Figure 1B demonstrates how, with some clever reconfiguration, new districts can yield very different results. Instead of a landslide victory for the dark grey option, after redistricting the light grey wins three of the five districts. Notice how, in each of these simulations, the number of squares remains the same in each district. That is to say, this form of district manipulation seems fair in that no one district is ever overloaded with more precincts than the others.<sup>3</sup>

The two most common forms of gerrymandering practices are referred to as *packing* and *cracking*. In packing, the party in power attempts to “pack” as many of the opposition party’s constituents into a few districts, thereby wasting voters’ political power. As a hypothetical example, if a candidate regularly wins a district by 75%, moving more voters who will



**Figure 1. Two versions of four districts (adapted from Naas (2015).**

support the candidate into her district and out of other, more competitive districts may help the other party win more districts. The cost is minimal here, as it would only mean further conceding a district that would have been lost regardless. In cracking, the party in power “diffuses minority strength across several districts” (Bervoets & Merlin, 2017, p. 474). Here, the focus is on breaking down coalitions or preventing them from forming altogether. If a district looks too competitive, mapmakers might move and spread some of the opposition party supporters across other districts to break down the support and keep political strength from coalescing.

That said, we should keep in mind that these digital technologies have only exacerbated this fixation with (re)districting. As McGann, Smith, Latner, and Keena (2016) assert, GIS “may make it possible to more accurately draw biased districts, but it cannot explain the decision to adopt such districts” (p. 139). Maps, even in their analogue forms, have always been prone to purposeful representational breakdowns given their constructed nature. Barton and Barton (2004) have noted the rhetorical power of maps, given that mapmakers are charged with decisions on what to include, what to exclude, and how the places that maps portray should be represented. Such power to construct visual representations of space shapes users’ interpretation and expectations. For example,

<sup>3</sup> We can see this hypothetical situation in play in the 2012 election when “1.4 million more Americans voted for Democrats than Republicans, and yet the Republicans won 33 more seats in the House of Representatives” (Berghel, 2016, p. 91).

compared to their predecessors, contemporary maps of the London Underground present a system that “clear, articulate, and legible—all things that London as a city is not” (Trieb, 1980, p. 15).

Moreover, as ideological artifacts, maps can reveal biases and subjectivities—both hidden or overt. Barton and Barton (2004) point out that “International maps designed in the past by French cartographers often designated Germany with the French word *Allemagne* rather than the German *Deutschland*. The supplantation of indigenous forms with foreign versions amounts to a repression, by linguistic appropriation of the otherness of the Other” (p. 240; see also Wallach, 2011). My point here is that we should not blame GIS as a tool, given that the desire to control how spaces are represented have been embedded within maps themselves—indeed, as we recall, the very first gerrymander required no digital overlays and relied on information about voters that was not as precise as it is today.

What we should pay attention to, however, is that in whatever form they take—whether physical or digital—district maps seek to consolidate power. They not only deploy visual cues and elements “for maximum persuasive effect with a particular targeted audience” (Prelli, 2006, p. 92) but also carry forth material consequences that stem from such representations—especially when they have been gerrymandered to produce a desired outcome. Indeed, as Amy Proppen (2012) suggests, maps have the potential for enacting bodily material consequences. Proppen describes the 2003 court case in which the Natural Resources Defense Council filed a lawsuit against the National Marine Fisheries Service to halt their deployment of low-frequency active sonar (LFA) in the Pacific Ocean. As Proppen asserts, each entity produced its own map conveying its own projections and interpretations of the data regarding the impact that LFA sonar deployment would have on certain geographic areas. Through this case study, she notes that “artifacts such as the map can function rhetorically to make competing knowledge claims about contested space—claims that may then play a role in the shaping of environmental policy and advocating for nonhuman animal bodies” (p. 166). With this attention to the constructed nature of mapping, I highlight the material and political consequences on people that are brought about by these gerrymandered maps. Beyond the problems

that arise from partisan gerrymandering, these tools can also intentionally or unintentionally limit minority citizens’ voices, and although courts have been largely permissive of partisan gerrymandering schemes (Morrill, 2004, p. 81; Monmonier, 2001, p. 48), the Voting Rights Act (VRA) has made it much less permissible to use race or language as elements by which one can redistrict. As we shall see, the current available means of gerrymandering, however, make it easier for mapmakers to justify their way around such prohibitions by, ironically, claiming that gerrymandered districts are in keeping with the VRA’s efforts to allow more opportunities for minority citizens.

### History of Voting Rights Act with Respect to Gerrymandering

In the following section, I will present a case study of Texas Districts 23 and 35 which showcase how these maps serve as products of technological expedience. There are two specific details regarding the VRA that we must keep in mind when looking at this case before proceeding, however. After Reconstruction, even though freed slaves were allowed to vote, many voting sites and systems in the South still found ways to prohibit voting by African Americans in subtle and explicit ways. With time, and after decades of protests, Congress passed the Voting Rights Act of 1965. Although I do not have sufficient space here to give a full discussion of the trajectory that the VRA has taken, I will focus on Sections 5 and 2, which will be most relevant to my analysis on the Texas court case.

Section 5 of the 1965 VRA provided certain provisions to a few jurisdictions in several Southern states that were particularly problematic regarding the practices mentioned above. In Alabama, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Virginia, Section 5 requires that any proposed voting change “does not have the purpose and will not have the effect of denying or abridging the right to vote on account of race or color or [membership in a language minority group].” This, it should be noted, applied only to attempted changes in certain jurisdictions, which left many minorities still without much of a voice. In the 1975 revision to Section 5, after much advocacy by Hispanic citizens



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and indigenous peoples that “forgotten minorities” be included in the VRA, these provisions were extended to Texas, Alaska, and Arizona (Bullock, Gaddie, and Wert, 2016, p. 25).

Section 2 of the 1965 VRA explicitly “prohibits the adoption of voting qualifications that restrict or deny the right to the vote on the basis of race” (Lublin, 1997, p. 4). In 1982, Congress rewrote Section 2 to “reduce the evidentiary burden on plaintiffs challenging existing electoral systems” (Bullock, 2010, p. 57). In effect, this meant that minority citizens had better prospects for demonstrating that their electoral system had given them “less opportunity to participate in the political process and to elect their preferred candidates than whites had” (Bullock, 2010, p. 57). Being able “to challenge the practices that prevented [minorities] from winning elections” (May, 2013, p. 223) opened the doors to several cases of litigation. With all of that in mind, however, it should be noted that neither of these sections and updates dealt exclusively with redistricting.

Yet, these legal cases were important pieces of a larger puzzle—ones that utilized (and continue to utilize) careful attention to redistricted maps. The 1986 decision in *Thornburg v. Gingles* (1986), for example, allowed lawmakers to create majority-minority districts. The *Gingles* case helped to establish a heuristic for determining whether a minority-majority district should be created based on three characteristics. In essence, the minority group:

- Must be large enough and yet compact enough to “constitute a majority.” That is, a minority-majority group cannot be constructed across a large geographic swath.
- Must be politically cohesive.
- Must show evidence that indicates that a White majority would vote in large enough numbers to defeat a minority population’s candidate of choice.

Frequently, mapmakers focus primarily (or solely) on the first condition, relying only on Voting Age Population (VAP) data to create minority-majority districts, and skirting the other two conditions. This is problematic because, as the Supreme Court ruled in the 2003 case of the *League of United Latin American Citizens (LULAC) v. Perry* in Texas, focusing only on racial characteristics hides the fact that “there are divergent interests even with groups that are racially or ethnically homogenous” (Hebert et al., 2010, p. 45).

What is important to remember for the proceeding analysis is that the *Gingles* (1986) requirements seek to find connections between race and political interest. It is with these provisions and questions in mind that we turn our attention to the 2011 Texas district map.

### Redistricting Texas: The 2011 Map

When the 2010 national census results necessitated implementing redistricting protocols, a large number of states were led by Republican majorities, meaning that the task would fall to Republican-organized committees. This was the case in Texas, where Burt Solomons, the Republican representative from District 65 in Denton County, chaired the committee to institute a new district plan (Perez, 2017a, p. 40). Serving along with him were 12 other Republicans and 5 Democrats. As Solomons stated that he was “not experienced or knowledgeable about redistricting law” (Perez, 2017a, p. 43), he relied on the Texas Legislative Council and the staff that he had put together to ensure that any maps the House Redistricting Committee drew up passed the measure of legality for support. One of the most important professionals that Solomons hired was Ryan Downton, whose previous redistricting experience, interestingly, the Court Findings document states “consisted of ‘self-study’” (Perez, 2017a, p. 41). In February 2011, the census data was released and Solomons’ group began the work of redistricting. Although several iterations were created of Texas’ potential congressional districts, the final version carried many implications for minority voters across the state.

Downton was primarily responsible for using the Texas legislature’s internally developed GIS software, called “RedAppl” (short for “Redistricting Application”). After his 1,000-hour training period, however, Downton reported that he had still felt unsure of the accuracy of the data and how numbers were being aggregated when precincts were split. During this time, he had access to all of the data within the RedAppl GIS:

election returns for races (primaries, runoffs, and general elections) from 2002 and 2010...; data on total voter registration; SSVR [Spanish Surname Voter Registration]; voter turnout; selected county and city elections through the



2010 general election; total population and voting age population by race, including black, Hispanic, black and Hispanic, Anglo (white only), and other. (Perez, 2017a, p. 37)

This last point on racial information is particularly interesting to note. There is a distinction between Spanish Surname Voter Registration and Hispanic Citizen Voting Age Population (HCVAP) that needs to be made clear.

In his mapmaking, Downton retrieved information on Hispanic populations and crossed them with voting age populations. Also note that the report identified “black,” “Anglo,” and “Hispanic” as races. This is not exactly true according to how census information is recorded. Self-identifying Hispanics and Latinos do not appear as a racial category in the data for the maps like Black and White Americans do. We can recall from Pimentel and Balzhiser’s (2012) analysis that the census asks people to mark if they identify as Hispanic, Latino, or Spanish, and then select a subcategory based on their nationality (Mexican, Cuban, Dominican, etc.). However, the census clearly states that these are not races, and all census takers—even Hispanics and Latinos—must select a race from the options such as “White,” “Black, African American, or Negro,” “American Indian,” “Japanese,” “Korean,” and so forth. No Latino or Hispanic identities appear in the choices for race, though “some other race” is an option, which census takers can select and write in. As a result, both HCVAP and SSVR information are used to confirm racial demographics (Texas Legislative Council, n.d.), which can cause some discrepancies if one is aiming to redistrict based predominantly on race.

From the analysis of these population blocks and precincts, Downton developed a new district map for the following decade’s election. On the surface, most of the map remains fairly consistent with its 2006 version (see [http://www.tlc.state.tx.us/redist/pdf/congress\\_historical/c\\_2006G\\_2010.pdf](http://www.tlc.state.tx.us/redist/pdf/congress_historical/c_2006G_2010.pdf)) There are, however, a few notable differences. District 23 (CD 23) in the 2011 district map (see Figure 2) now stretches farther out than before and claims more territory within its boundaries. Loving, Winkler, Ward, Crane, Upton, and Reagan counties are now all engulfed by the district. Moving southward, we can see that District 23 now encompasses all of Crockett county and all of Schliecher and Sutton counties (which were all previously in

District 11). Finally, the southern portions of District 23 have also expanded to incorporate Frio and part of LaSalle county. The only area where CD 23 seems to have lost any population is in Maverick county to the very south—a point that will become important later. The overall expansion is not by itself problematic. Rather, the reasons for the redistricting as well as the political impact that such changes could have are what resulted in the plaintiffs arguing before the circuit court that these were illegally drawn lines.



**Figure 2. District 23 (CD 23) in the 2011 district map**

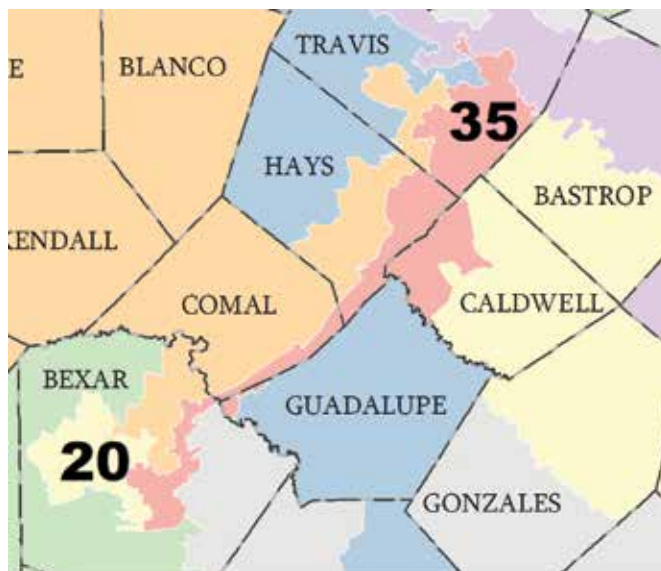
Interestingly, legislative mapmakers<sup>4</sup> decided that CD 23 already acted as a minority-majority district, if not in name then unofficially, because it was already over 50% Latino in terms of both Spanish Surname Voter Registration Records and Hispanic Voting Age Population. Plaintiffs in this court case, composed of local residents living in these districts as well as organizations like LULAC and the Mexican American Legal Defense and Educational Fund (MALDEF), had raised warnings about the options that the committee had been putting forth throughout this mapping process. Their biggest complaint was that CD 23 was not a Latino opportunity district (another term for a minority-majority district) and that even though Solomons and his task force would have preferred to have treated it as such to pack in more Latino voters, that other factors such as election performance helped to determine that designation.

<sup>4</sup> Even though Downton was primarily responsible for analyzing the data and developing new maps, I use the phrase “legislative mapmakers” to encompass all actors involved in not just creating the map but approving it as well, such as Solomons and his House Redistricting Committee (see Perez, 2017a, pp. 13–14).

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For their part, mapmakers argued that this district served as a minority-majority district given (solely) that the SSVR was already over 50%. As a result, mapmakers felt that the district provided “an opportunity for a politically cohesive Hispanic voting population to overcome any equally cohesive Anglo voting bloc” (Perez, 2017b, p. 11). We note here how policies meant to facilitate minority engagement with the political system are used as a means to justify minimizing political power (Lublin, 1997; Waymer & Heath, 2016). Treating (and expanding) CD 23 as a minority-majority district would allow mapmakers to bring in other minority populations from other districts in the name of “cohesion,” when, in reality, there was no evidence that cohesion already existed in CD 23.

Unlike CD 23, District 35 (CD 35) was created as a new district in the 2011 district map. It runs along I-35 from Austin Southwest to San Antonio. Often referred to as the “upside down elephant” (Ingraham, 2014), we can see its odd, elongated shape that starts in Travis County then straddles Hays, Caldwell, Comal, and Guadalupe counties before ending at Bexar County (Figure 3). More importantly, looking at the previous House District map in place before 2010, it is evident how Downton carved up District 35 from very specific segments of districts 25, 28, 21, and 20 ([http://www.tlc.state.tx.us/redist/pdf/congress\\_historical/c\\_2006G\\_2010.pdf](http://www.tlc.state.tx.us/redist/pdf/congress_historical/c_2006G_2010.pdf)). And, interestingly, this district connects certain parts of Austin with certain parts of San Antonio, via Interstate 35. Regarding CD 35, plaintiffs argued that the district had been gerrymandered—specifically created to also pack in as many Latino voters as possible, siphoning them off from other districts in a move that would dilute the Latino vote from those nearby districts. Here, too, the defendants turned to race as the main justification for the creation of the elephant. And, although Voting Age Populations in the district is an important dataset to analyze, as many of their advisors in the Texas Legislation Council had cautioned the committee, it is insufficient for creating a new Minority Opportunity District. One cannot simply create a 51% Hispanic district and claim that it is now serving the needs of the population. Despite these warnings and the numerous statements of legal issues that the committee had received throughout 2011, this final district map passed the state legislature in June 2011.



**Figure 3. District 35 (CD 35), running along I-35 from Austin Southwest to San Antonio**

Plaintiffs quickly launched lawsuits to have these districts fixed. Although the Congressional District Map was revised in 2013 due to these outcries, the changes that were made were not substantial enough, meaning that “infirmities from the 2011 plan remained in the interim plans that the plaintiffs contended were continuing to injure them” (Perez, 2017b, p. 4). Thus, when the district court reviewed the case in 2017, Justices Xavier Rodriguez and Orlando Garcia stated in their 2-1<sup>5</sup> opinion that their decision in favor of the Plaintiffs was based on the original 2011 plan because the plaintiffs were still being harmed by the districts drawn with the defendants’ intent to discriminate.

The circuit court ruled that “because mapdrawers had the intent to provide Hispanic voters less opportunity to participate in the political process and elect their candidates of choice, and they effectuated that intent in CD23, CD23 violates § 2 in both intent and in effect” (Perez, 2017b, p. 29). As we will recall, Section 2, which prohibits restricting voting rights on the basis of race, eventually allowed for plaintiffs to challenge racially gerrymandered districts in court. In the 2017 decision, the justices stated that although population is certainly the most visible indicator of who resides in a district, they agreed with plaintiffs who argued that other factors such as “access to the political process” and focusing on a “totality of circumstances”

<sup>5</sup> Justice Jerry E. Smith dissented.

served as a better “barometer of dilution of minority voting strength” (Perez, 2017b, p. 13). These included: “(1) the history of voting-related discrimination in the State or political subdivision; and (2) the extent to which minority group members bear the effects of past discrimination in areas such as education, employment, and health, which hinder their ability to participate effectively in the political process” (Perez, 2017b, p. 14).<sup>6</sup> Additionally, given that minority-preferred candidates won the district in two of the last three previous election cycles<sup>7</sup>, it seemed odd that a new Latino opportunity district needed to be created here. In other words, one could not simply utilize race as the driving force to “create” a solution for a problem that did not exist.

As mentioned, in addition to bringing in new Hispanic voters to CD 23, mapmakers also “cut” Maverick County in half. While mapmakers argued that this was mostly to create “balance,” the Court seemed more suspicious given the circumstances that led to this decision. In the 2010 elections, Republican Francisco “Quico” Canseco was elected to the U.S. House of Representative to represent CD23. However,

Republican leaders in the House and Senate were concerned that Canseco would lose the 2012 election unless the district was changed to protect him.... As it did in 2003, the Legislature therefore reconfigured the district to protect a Republican candidate who was not the Latino candidate of choice from the Latino voting majority in the district. And as it did in 2003, the Legislature intentionally split a largely Hispanic county (Maverick County, which is 95.7% Hispanic) and city (Eagle Pass) to exclude from CD23 politically active Hispanics who would not support Canseco, while adding in all or parts of more Anglo counties. (Perez, 2017a, pp.19–20)

The Justices were very adamant that these lines were drawn with great precision. In fact, people were “moved” in and out of the district very methodically. The Justices wrote that

In addition to the Maverick County split to exclude politically active Hispanics who would not support Canseco, mapdrawers (specifically Downton) took steps to increase the turnout gap between Latinos and Anglos and to decrease Latino cohesion in the district.... Downton understood that manipulating Latino cohesion and turnout would affect a district’s performance for minority voters. Downton admitted to increasing the district’s SSVR while simultaneously intentionally manipulating (decreasing) Hispanic voter cohesion in the district by including Republican Hispanics and excluding non-Republican (Democrat) Hispanics. He stated that he did this by looking for precincts with high SSVR and including those with high voting percentages for Republicans and excluding those with lower voting percentages for Republicans. The intentional use of race to maintain or increase the HCVAP and SSVR levels was not done to provide or protect Latino voter opportunity but rather “to create the facade of a Latino district.” (Perez, 2017b, p. 21)

And despite defendants’ claims that these changes were made to help “maintain the performing nature of the district,” as the Justices noted, the district actually did not perform as well in the subsequent elections in terms of electing minority-preferred candidates, a development that, as the Court asserted, “map drawers were not only aware of... but intended. (Perez, 2017b, p. 23).

Much like CD 23, plaintiffs contended that CD 35 is an “impermissible gerrymander,” because it too relied predominantly on race. In this case, adhering to the VRA’s support for minority districts was used as a pretext for targeting Democrat Congressman Lloyd Doggett. From 2005 until 2013, Doggett represented Texas’ 25<sup>th</sup> district. In 2011, when the new district map was put in place, Republican mapmakers sought to unseat Doggett by limiting his base and stretching support along a narrow strip of the highway from Austin to San Antonio. Indeed, this was so carefully orchestrated that Doggett’s house no longer resided within this new district (King, 2012)! The hope was that those residents living in San Antonio would not vote for him, as they were not very familiar with him and would instead vote for his competitor or that Doggett would at least tire himself out having to organize across a large stretch of space (a ploy which ultimately

<sup>6</sup> Berman (2015) provides examples of this historic stranglehold on Hispanic rights (pp.107–108).

<sup>7</sup> Note that the point of majority-minority districts is not necessarily to “guarantee” a candidate of choice every election cycle. Therefore, the fact that the candidate of choice does not win every cycle does not automatically mean that CD 23 should become a Latino opportunity (majority-minority) district.

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failed).<sup>8</sup> More importantly, packing all the Democratic Hispanic voters into CD 35 diluted the surrounding districts' Democratic support, leaving them open for Republican candidates. Interestingly, because courts have mostly turned a blind eye to political gerrymandering, defendants in this case relied heavily on this argument as justification for their overt racial gerrymandering of these districts. That is, mapmakers argued that this was intended to be a *political* gerrymander and not a (purposeful) *racial* gerrymander. Yet, in their decision in the case, the justices made it clear that the former is impermissible if it results in the latter: "The fact that creation of an HCVAP-majority district also fulfilled a political goal does not mean that the district was not created with race as the predominant consideration" (Perez, 2017b, p. 41).

Much like the machinations with CD 23, there was a facade of compliance with the VRA that allowed mapmakers to convince themselves<sup>9</sup> that this map would serve minority voters. But, as the Court decided, the counties already seemed to perform well for Latino voters' candidates of choice. In essence, these maps served as a solution in search of a problem.

### Discussion

As we have seen, previous studies have highlighted how Latinos are othered in political documentation. Such representations typically imply that Latino groups are a threat to Anglo Americans. Within this case study, we observe how election technologies go one step further and attempt to allay fears of Latino groups overtaking Anglo Americans by mitigating the political power that comes from casting votes in elections. What is most evident in the rearticulation of the Texas district map is the ease with which legislative mapmakers can engage in political gerrymandering as a permissible practice to subvert the VRA's provisions for allowing the creation of more balanced districts. What emerges from looking at this case is how those in power utilize legal and mapping technologies to make arguments justifying their actions. These technologies rest on the claim that

such actions will counterintuitively provide Latinos more political voice, not less.

Because the VRA (and the subsequent cases that stem from it) makes points about race—how it can and cannot be taken into account when developing or changing voting processes and procedures—mapmakers saw this as an opening to use race precisely to argue that the redistricted map should stay in place. Rather than erasing Latinos (Johnson, Pimentel, & Pimentel, 2008) or subconsciously associating them with violence (Whitney, 2013), the redistricted map utilized increasingly sophisticated GIS and census and voter data to insidiously promote egalitarian electoral practices while, in reality, consolidating power along racial lines.

Researchers have noted that maps narrativize data—they embed specific narratives about place for readers to consume. For example, in his analysis of Charles Booth's poverty maps of London, Kimball (2006), notes that Booth's visuals aim to present a "transparent" look at a reality that often lurked underneath the surface, telling a story that was often hidden from view. Likewise, Welhausen (2015) asserts that contemporary maps of Yellow Fever outbreaks narrativize scientific progress, giving a sense of global containment, because the disease is no longer the public health concern that it once was in the 19<sup>th</sup> century—despite the fact that "the disease remains endemic in 44 African and South American countries" (p. 275). The same can be said for district maps. Clearly, in their political and technological expediency, legislative mapmakers utilized mapping technologies to translate spatial distributions of people into visual "facts on the ground," thus creating a story of who should be grouped together, solely based on racial characteristics and not on any deeper politically cohesive arguments.

That said, such translation also manipulated what and how future state and national policies will be crafted. The fact is that, unlike other maps that represent space, district maps contain the propensity for foreclosing political agency; that is, these decisions cannot simply be "voted away," because how one votes has already been predetermined and accounted for. Regarding school district maps, Denis Wood (2010) writes that:

while [such a] map may "only" be a representation of desire, there are significant legal reinforcements

8 Yoshinaka and Murphy (2009) discuss "population instability" within the context of gerrymandering in more detail.

9 Although, even Downton himself stated that he thought CD 35 was "borderline" in terms of its legality even when he was drawing it up at Solomons and his staff's request.



to alter material realities to conform with these desires. If your kids already go to the school the map proposes, no change in your behavior is required. But if change *is* required... this change is made in response to a force. In the case at hand, the force is exerted by a school board *through* a map. (p. 2)

The precision with which these maps are created makes it harder for citizens to enact political power, because their localities have already been mapped and their votes have been packed or cracked. In this sense, they keep incumbents safe and make it unlikely that a change can come about. And although courts, such as the Western Texas District court, may step in to challenge the legality of these visuals, we should keep in mind that Congress (composed of those very representatives who are voted on by each district) has the “authority to regulate the operations of whatever lower courts it sees fit to create” (Geyh, 2006, p. 31; see also Toobin, 2017). This means that if districts are gerrymandered in a way that mitigates minority voices, representatives whose agendas might not include making a space for such citizens can alter the judicial avenues that minorities have relied on to gain equal footing in elections.

## Implications

I end this analysis with two implications for technical communicators. The most immediate takeaway is that, although difficult, we need to move beyond compliance and instead constantly aim for promoting equity in our work. Seemingly, there is nothing wrong with the construction of the Texas C185 map created by mapmakers in 2011. Indeed, it seems to check off numerous boxes that are best practices in designing maps in GIS software. The mapmakers used different colors to visually display the boundaries between the different voting districts and do not place the same color next to districts in order to communicate contrast (Sentell, 2016, pp. 139–140). Moreover, mapmakers avoid utilizing pure green or pure red, which helps individuals with deuteranopia read their map (Leff, Davis-Holland, & Ducey, 2016). Instead, light green and light red are used and rarely placed next to each other; additionally, the use of pastels, like “cool” colors, have peaceful and calming associations (as opposed to warm colors that have sharp or emotional associations;

see, for example, Madden et al., 2000; MacLaury et al., 1992; Welhausen, 2015). There is a clear hierarchy of the data presented as well, with bold numbers indicating district numbers and the names of each county that falls under each district presented in smaller font and in capital letters. Furthermore, for districts that are too small to be legible; such as districts 2, 29, and 18; mapmakers provided insets with higher detail. Digging deeper, one could even claim that mapmakers stuck to the letter of the law by noting that minority opportunity districts were created, as the VRA stipulates.

At the same time, many might argue—as the plaintiffs did—that mapmakers ignored other parts of the regulations and were therefore not compliant. Indeed, we could look at the district court’s decision as an indictment of noncompliance with the regulations. However, we should remember that this was not a unanimous decision. Tellingly, Judge Jerry Smith dissented, partly due to the fact that because the primary motivation of the mapmakers was political gerrymandering, that “race did not predominate” in the creation of these districts (Perez, 2017b, p. 41, n. 39). That is difficult to believe given how the defendants consistently used Hispanic surnames as the primary element to group or split people in these districts. Regardless, my point here is that meeting compliance alone is not enough to assure that a document will impact users in positive ways. Much as Spinuzzi (2007) noted within the context of Web design, there is a “contradiction between accessibility as compliance and accessibility as user experience” (p. 198). Following procedures may result in documents that are compliant and publishable, but they may have adverse effects on individuals. As a result, we may be left with “documents [that] privilege utilitarian efficiency (compliance with regulations to protect companies) at the expense of critique and ethical action” (Evia & Patiarca, 2012, p. 342).

To illustrate an example of how technical communicators can promote equity in their practice, as more organizations and government agencies and municipalities adopt plain language guidelines, technical writers may find it expedient to ensure that they are in compliance with those guidelines, creating a publishable document that might still not be usable by clients and constituents. In government settings where plain language guidelines have been adopted, staff must ensure that their policy documents meet certain standard, static requirements. Yet, often, technical writers have to make



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the case for more fluid understandings of audience in which they take into account how “comprehension and reading abilities intersect with class, race and socioeconomic status” (Adkins, 2017) to produce documents toward an ethical end. This dichotomy between compliance and accessibility is not surprising given that plain language guidelines are very specific and distinct from what we might normally understand as “readable” and “comprehensible” (Jones et al., 2012). Much like the mapmakers constructing these districts, we can “check off” the boxes necessary for compliance but still lose sight of the fact that individuals will be negatively impacted by our documents if we choose to ignore issues of justice and equity.

On a larger scale, this case illustrates that technical communicators need to devote our time and skills toward creating politically fair systems. Of course, it is not possible—or advisable—for technical communicators to become experts in GIS software. However, we can promote equitable election processes through our research, teaching, and advocacy work. Interrogating the rhetorical-political choices made in district maps can be a good start to becoming more involved in such work. Obviously, these visuals are heavily tied to policy, so one must have access to some demographic data and mapmakers’ original claimed justification for producing this map. There are no simple ways to outright detect political or racial gerrymandering, but two aspects to consider might be:

- The racial makeup of a district
- Previous voting patterns—are minority candidates of choice being elected? If so, there are no grounds for creating a minority opportunity district.

Yet, even if our states’ districts are currently not gerrymandered in any obvious way, there is no guarantee that it won’t be in the future. Even when states delegate redistricting to an objective third party, the process can be very contentious (as was the case in Arizona—see Pitzl, 2011). Therefore, it may be helpful to aid in proactive efforts to stop or even prevent unethical redistricting practices.

This is in keeping with our professional roles, as Hart-Davidson (2013) notes that part of our responsibilities as technical communicators may involve putting our knowledge and skills in the community by volunteering to take part in causes such as with local advocacy projects (pp. 69–70). Many local nonprofit

groups, such as Clean Missouri, OneVirginia 2021, and RepresentOK (Oklahoma), and initiative-based organizations, such as publicmappingproject.org, have taken up the call to push for more ethical redistricting laws. Each of these organizations has calls for volunteers to help in their efforts, each with varying degrees of involvement, from working the polls to working with Python to create collaborative mapping platforms.

Serving on neighborhood boards and helping nonprofit groups with their documents and social media presence may seem small when dealing with larger, systematic injustices like gerrymandering. However, social advocacy organizations such as LULAC were part of the conglomerate of plaintiffs against Plan C185, and they frequently seek volunteers throughout their various national locations to help explain technical documentation to people in local communities. As technical communicators, we know the importance of language in documents and, though we are not legal experts, we can help point out the ways that language can be interpreted to produce iniquities in political and electoral processes. Moreover, we can collaborate with subject matter experts in these organizations on designing visuals that will help lay audiences understand the implications of proposed maps and policies. Certainly, there are other ways to become involved as well. Pryor (2017) offers her experience of creating bilingual voter registration cards for Hispanic residents as a possible action-based avenue for participation. Regardless, what matters most is taking note of these inequities and responding in ways that highlight our strengths.

In the classroom, we can teach students to interrogate legislative and mapping technologies as they pertain to electoral implications. We must remember that in traditional college settings, most of our students will be eligible to vote in general, midterm, and primary elections throughout their college careers. Asking them to study their states’ district maps would be a good exercise in discussing the distribution of power. Coupling this with the different layers available via ESRI (which currently offers a free trial period) could provide a powerful example of how technological rationality impacts them on a local scale and lead to important conversations regarding the justification for both using technological tools and big data for political gain.

That said, as importantly, we must remember the direct role that race and ethnicity play in discussions pertaining to these election technologies. After all,

even our current Presidential electoral map has residual traces of James Madison's 18<sup>th</sup>-century electoral system that was created as a way to maintain slavery in the South (Amar, 2016). Such a system would give Whites power by counting Black slaves as three-fifths of a person; of course, they could not actually vote; their three-fifths representation could only help add to the power of White Americans. It should not surprise us then that the systems that have been created to promote democracy can leave many disenfranchised. Thus, we should continue to examine the ways that race and ethnicity are impacted by the legislative and mapping technologies that shape our elections and work diligently to call attention to it in our teaching, research, and advocacy work.<sup>10</sup>

## Conclusion

We can see how district maps exhibit agency beyond psychologically influencing our representation and understanding of places. These maps dictate electoral and federal power along their seemingly (but very much not) inconsequentially drawn boundaries. We must remember, however, that as rhetorical technologies, these same maps also gather together a number of constituencies that resist such power grabs in order to promote more equitable election-based practices. As technical communicators and technical communication researchers, we should be attuned to the processes that both lead to their creation and to their dismantling in cases where they promote inequitable consequences. Through such work, we can play our part in helping to bring about just systems of democratic integrity.

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<sup>10</sup> In a 5-4 ruling, the Supreme Court in 2018 overturned the Texas district court's decision, thus allowing the districts to stand. This signals a continuing need to pay attention to how these visuals are crafted. Given that racial gerrymanders are ostensibly no longer impermissible, it falls on local legislative action to ensure that districts are drawn in fair and equitable manners.

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# Technologies of Disenfranchisement: Literacy Tests and Black Voters in the US from 1890 to 1965

By Natasha N. Jones and Miriam F. Williams

## Abstract

**Purpose:** Largely due to the latest presidential election in the U.S., voting interference and voting technologies have come to the fore of national debates. However, deploying technologies (broadly defined) as a way of interfering with voter rights is not a new phenomenon.

**Methods:** In this study, we identified and located historical literacy tests (along with other related texts) that were used to disenfranchise black voters in the U.S. from 1890-1965. We conducted a critical rhetorical analysis of the documents using McCornack's (1992) deceptive messaging criteria.

**Results:** We found that even though the rhetorical and technical style and tone of the documents appeared to be objective and neutral, the literacy tests served as a technology of disenfranchisement, a way to oppress and marginalize, black voters.

**Conclusion:** We argue that texts and technologies are not always designed with goodwill in mind and texts and technologies that are complicit in supporting and promoting oppressive practices have social, cultural, embodied, and material impacts on communities. We assert that technical communicators can look for possibilities and opportunities for resisting discrimination through texts.

**Keywords:** Voting, Technology, Social Justice, Literacy, Historical Documents

## Practitioner's Takeaway

Based on this study, practitioners can consider:

- The ways in which the texts and technologies that we design, develop, and deploy are complicit in the marginalization of groups of individuals.
- How writing style and tone in a text can play a role in obscuring oppressive practices.
- Possibilities and opportunities for designing texts as tools of resistance.

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### Introduction

Over the past two years, U.S. voters and government officials have expressed concern over Russian interference in the 2016 U.S. Presidential election. As we debate the results of federal investigations into Russian interference in states' election systems and the use of Facebook and Twitter to mislead U.S. voters during the 2016 elections, it is important to reflect on the history of legal interference and interruptions in the U.S. voting process. Many of us can recall the punch card (i.e. hanging chads) problems encountered during the 2000 U.S. Presidential election. From Janice Redish's "Guidelines for Writing Clear Instructions and Messages for Voters and Poll Workers" to Karen Schriver's interviews with the Orlando Sentinel (2004) and Miami Herald (2004), technical and professional communicators have been actively involved in making recommendations to improve voting instructions and ballots. In fact, technical and professional communicators are uniquely positioned to explore the ways in which voting technologies have impacted users' abilities to participate in democratic processes.

To date, however, technical and professional communication (TPC) researchers have not explored other forms of technical communication (forms, manuals, reports) used to disenfranchise U.S. voters or resist disenfranchisement from the 1890s until the Voting Rights Act of 1965. We are aware that President Lyndon B. Johnson signed the Voting Rights Act of 1965 after civil rights activists (including Martin Luther King, Jr., John Lewis, and hundreds of protesters) marched from Selma to Montgomery, Alabama to protest Black disenfranchisement. Of course, it was during one of these marches, Bloody Sunday on March 7, 1965, that Alabama state troopers' brutal attack on civil rights protesters was televised. It is important to understand that technologies, from television to Facebook, can be deployed in ways that promote agency or reify oppression, and we should examine the historical ways that these technologies have altered the political and cultural landscape of our country. Moreover, it is important to grapple with intentional deception and harm that can be not only embedded in, but be the sole purpose for, the design and implementation of some texts and technologies.

This article uses a comprehensive definition of *election technologies* to examine two types of historical

documents: literacy tests and voter registration applications, both administered to Blacks from the 1890s to 1965 to prohibit them from voting in U.S. elections. These texts were designed to intentionally confuse and prohibit prospective Black voters from exercising their rights. We assert that literacy tests function as technologies deployed with the goal of maintaining and enforcing White supremacy and controlling Black citizens' ability to exercise their rights to vote. We build on the work of TPC scholars (Stanley, 1995; Haas, 2007; Banks, 2006; Haas, 2012), who acknowledge a more holistic and inclusive definition of technologies and posit that technologies are often deployed as a way to preserve and maintain oppressive power structures while simultaneously devaluing the significance of technologies that subvert or resist Western, White, and patriarchal ideals of what constitutes a technology. As Haas (2012) notes, "race affects the ways in which technologies and documents are designed and used, how national and political values can inspire users to transform the work of technologies beyond their designed intent" (p. 281). Moreover, Haas reminds us that "technologies are not transparent things"; instead, technologies are "cultural artifacts imbued with histories and values that shape the ways in which people see themselves and others in relation to technology" (p. 288). We examine the ways in which these texts as technologies (a cultural historical tool integral to the accomplishment of a specific goal) are designed and how they are used to exclude. The function of these texts is, technologically speaking, just as important as the text themselves, because "technology is not just what does the work, it is the work" (Haas, 2012, p. 291). Thus, we examine the form and function of voter registration documents. Although we understand that many of these historical documents are written in plain language and have fairly reader-friendly document design, we aim to unveil the strategies (textual and visual) used to purposefully disenfranchise Black voters. Further, we trouble the ideal that technology empowers and enhances agency. Our study asks: In what ways do the literacy tests serve as a tool of oppression and disenfranchisement? What strategies did literacy test writers use to confuse readers in what appeared to be clear and well-designed documents? Finally, what are the contemporary implications for understanding the role that these historical texts as technologies play in the disenfranchisement of Black

voters? By examining historical literacy tests and voter registration applications, this study will unveil strategies that Southern states and counties used to disenfranchise voters, and it will also highlight civil rights activists' use of technical communication (i.e. manuals and reports) to help Blacks resist opposition at the polls.

### **A Critical Focus: Texts and Technologies as Sites of Oppression**

Communication studies scholars (McCornack, 1992; Scholl & O'Hair, 2005; Cole, 2014; McCornack et al., 2014) conducted research on information manipulation theory and intentionality in deception. McCornack (1992) summarized deceptive messages as falling into the following categories: "manipulating the amount of information disclosed, distorting the information that is disclosed, presenting the information as equivocal fashion, and /or presenting information that is irrelevant to the preceding discourse" (p. 4). Information manipulation theory explains intentionally deceptive messaging as a covert violation of audience expectations in relation to information quantity, quality, manner, and relevance (McCornack, 1992, p. 6). Technical communication scholarship, when wrestling with communication that fails the audience, has been mostly concerned with well-meaning and unintentional mistakes in technology, text, graphics, and document design. While the general perception that communicators and designers have their users' best interests at heart can be a positive and productive starting point, an acknowledgement of more sinister and cynical purposes for communication design is also necessary. Katz (1992) helps technical communicators begin to understand that although communication documents and technologies can appear benign, interrogating authors' underlying motivation and ethical stances can reveal harm. Katz notes "technical writing, perhaps even more than other kinds of rhetorical discourse, always leads to action, and thus always impacts human life" (p. 259). In this way, technical communication is not neutral or apolitical (Williams, 2013). In fact, technical communication is often imbued with the values and assumptions of its writers and society at large, often complicit in "preserving inequitable power structures" (Rose & Walton, 2015, para. 5). A number of scholars in technical and professional communication have expanded on Katz's work revealing the oppressive potential of technical

documents that seek to achieve efficiency rather than consider the impact of the communication on the lived experiences of others. For example, scholars such as Jones, Walton, and Moore (2017) and Scott, Longo, and Wills (2006) have emphasized the ways in which technical communication has been complicit in oppression and helped to sustain oppressive conditions. As such, examinations of how and why design of texts and technologies can be, have been, and are used for nefarious purposes must also be considered a viable and important focus of TPC research, pedagogy, and practice.

This more critical eye toward intentional harm and deception in texts and technologies is beginning to be taken up due to a focus on social justice in technical communication. Because the implications about the impact that the design of texts and technologies have on the human experience is becoming an issue that more and more scholars in TPC are taking up, the field of TPC is seeing an uptick in scholarship that engages with issues of social justice, human and civil rights, and oppression and empowerment (Haas, 2012; Walton & Jones, 2013; Ding & Savage, 2013; Agboka, 2014). More recently, a select few technical communicators have begun to specifically emphasize the ways in which texts and technologies have been intentionally deployed and implemented in oppressive ways, particularly in regard to race and ethnicity. For example, Williams (2010) examines the use of Freedman's Bureau reports to document purposefully deceptive labor contracts written to bind recently freed Black slaves into apprenticeships. Williams reveals that these labor contracts, which forced Black children to work for free and remain employed with the same landowner until adulthood, were legally enforced under Black codes. During Reconstruction, Black livelihood and citizenship were aggressively attacked by Black codes, Southern laws that codified discrimination in all areas of Black life. While Black codes were written in a manner that appeared to be racially neutral, the implementation of the codes were written to regulate Black labor. These Black codes are only one example of texts designed to disempower.

In addition to Williams, Walton (2016) reminds TPC scholars of the need to focus on human rights and human dignity in technical and professional communication research and practice. If we are to answer Walton's call, a focus on human rights and dignity necessitates an awareness of the ways in which

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technologies can strip away dignity and agency from individuals and populations, including racial minorities. Other scholars have called for specific attention to issues of how technical communication interfaces with race and ethnicity (Williams, 2010; Haas, 2012; Williams & Pimentel, 2014). Further, Walton (2016) notes that because design influences culture, TPC must be concerned with how values (including those surrounding issues of race and ethnicity) are enacted and embedded, “a weighty responsibility that would be well informed by *explicitly* prioritizing human rights and human dignity” (p. 410, emphasis added). Walton’s call is urgent:

I would argue that it is now an especially kairotic moment to engage in scholarship that combats exploitative oppression and violent oppression . . . With our field’s longstanding connection to technology (Dobrin, 1983), technical communication could be—arguably, has been and continues to be—implicated in exploitation if the documents and policies we craft perpetuate systems in which the work of the have-nots serves to maintain the authority, wealth, and power of the haves. (p. 412)

Indeed, it is clear that a focus on human rights and human dignity cannot always assume goodwill, especially given historical and contemporary examples of racism nationally and internationally. Making clear that goodwill is not always the motivation behind the design and implementation of technologies (and texts as technologies), Winner (1980) explores whether or not artifacts have politics. Winner reminds us “it is no surprise to learn that technical systems of various kinds are deeply interwoven in the conditions of modern politics” (p. 122). He further asserts “the physical arrangements of industrial production, warfare, communications, and the like have fundamentally changed the exercise of power and the experience of citizenship” (p. 122). As Winner stresses, politics are not separate from technical systems (including communication) that enable and support power structures. The ways in which technologies are deployed and the communication surrounding those technologies are not neutral or apolitical, just as technical communication itself (as a field) is not apolitical or neutral: “Technologies are not neutral or objective—nor are the ways in which we use them” (Haas, 2012, p. 288).

Texts and technologies indeed have significant impacts on issues of human rights, power, and politics. As Winner (1980) defines politics are “arrangements of power and authority in human associations as well as the activities that take place within those arrangements” (p. 123). Now, over a year after the culturally and politically divisive Presidential election of 2016, we can track a progression of scholars interested in interrogating the impact that texts and technologies; including laws and regulations, social and digital media platforms and posts, and voting technologies; are affecting already marginalized groups in social, political, and economic ways. Looking carefully at the ways in which voter technologies have historically oppressed marginalized groups in the United States, we see how the persistent issue of race is intractably interwoven with voting laws, voting rights, and voting technologies. As we write this article, the Pennsylvania Supreme Court has recently ruled on a political gerrymandering case in the state, arguing that legislative districts drawn in the state were “aimed at achieving unfair partisan gain” while also “undermin[ing] voters’ ability to exercise their right to vote in free and ‘equal’ election” (Ingraham, 2018). While some may view our current electoral system as in a state of crisis, with gerrymandering cases and investigations into foreign interference in our Presidential election, it important to recall the long history of voter suppression in the United States. The recent use of electronic technologies to influence or interfere with the voting process in the United States was preceded by almost 100 years of legally administered literacy tests, voting instructions, and applications created to disenfranchise Blacks after Reconstruction.

### Historical Background: Literacy Tests and Voter Registration Applications in the South

This section explores this history of literacy tests and voter registration applications as texts designed to purposefully disenfranchise and oppress Black voters in the United States. Literacy tests are verbal and written tests that Black people in the United States were required to “pass” before being allowed to vote. These so-called tests became popular in the southern United States after the passage of the Reconstruction Act in 1867. As Davidson (1992) notes, “Congress required as a condition for readmission to the Union that rebel states call conventions, to which blacks could be elected



as delegates, in order to devise new constitutions guaranteeing voting rights to black men” (p. 8). Of course, during this time, no women were allowed to vote. As the rebel states began to strategize new ways to work around constitutional amendments affording former slaves rights (namely, the 13th Amendment ensuring freedom from slavery and servitude, and the 14<sup>th</sup> Amendment granting citizenship and counting former slaves, previously considered 3/5ths of a person, as people equal to Whites), the idea of literacy tests began to take hold. As Davidson notes, “What the Fourteenth Amendment failed to do was explicitly prohibit vote discrimination on racial grounds” (p. 9). Further, Davidson asserts that White conservatives used all available means to disrupt and disenfranchise potential Black voters, including “discriminatory use of election structures (such as gerrymandering and use of at-large elections to prevent black officeholding), statutory suffrage restrictions” and violence (p. 9). Thus, from 1871 to 1957, there were no federal laws that opposed the administration of literacy tests in the South (Holloway, 2015).

Essentially, literacy tests capitalized on the fact that Blacks had little to no access to formal education, which prevented acquiring skills in reading and writing. According to Heather Williams, antiliteracy laws criminalized enslaved Blacks who attempted to read or write as early as 1740 (Williams, 2005, p. 13); Blacks who could read and write posed a threat to conservative Whites during the Reconstruction era. As Williams (2005) asserts, “Reading indicated to the world that this so-called property had a mind, and writing foretold the ability to construct an alternative narrative about bondage itself. Literacy among slaves would expose slavery, and masters knew it” (p. 7). It is not surprising that, even after slavery, access to reading and writing continued to be used as a way to oppress and silence. Davidson (1992) reveals that the literacy test; a test that required potential Black voters to prove a certain level of proficiency in reading, writing, and comprehension; was “the most effective barrier, aside from the ever-present threat of violence and economic reprisal in the Deep South” (p. 13). In fact, the author states that due to unequal access to education and arbitrary administration of the tests, White registrars were “a law unto themselves,” locking Blacks out of the voting process (whether literate or not) while also “allowing illiterate whites to vote” (p.

13). Essentially, “literacy tests systemically incorporated a state’s educational system in an era when blacks received unequal education in segregated schools” (Goldman, 2004, p. 614). Further, Riser (2010) notes that some literacy tests were administered orally by White registrars whose roles were to disenfranchise “blacks and Republicans and sometimes Populists—anyone who threatened conservative white Democratic hegemony” in the South. These registrars also used a grandfather clause that “quelled whites’ fears” regarding the implementation of literacy tests that illiterate and uneducated Whites would also fail (Riser, 2010).

In addition to literacy tests, voting registration was also designed as a way to purposefully disenfranchise Black voters. Again, Davidson notes that in the case of Dallas County, Alabama (the location of the city of Selma), not only did registration only occur two days a month, but an “applicant was required to fill in more than fifty blanks on a form, write a part of the Constitution from dictation, read four parts of the Constitution and answer four questions on it, answer four questions on the workings of government, and swear loyalty to Alabama and the United States” (p. 15).

Congressman John Lewis, who marched on Bloody Sunday in Selma, Alabama, describes the Alabama voting registration process in *Across That Bridge: A Vision for Change and the Future of America*. Lewis wrote:

To register in Alabama, a person had to fill out a four-page application that was developed by the White Citizens Council, a coalition of business, government officials, and prominent citizens who collectively imposed economic sanctions against any black person who even attempted to register; they could be fired from their jobs, evicted from their homes, and foreclosed upon by banks or other lenders. The council made it easy to discover whom these folks were. Since the registration office was open only during business hours on the first and third Monday of each month, they had to ask for time off from work. In a small rural town, news travels fast. In addition the names of all applicants were published in the newspaper. As if these methods of intimidation were not discouraging enough, the council would also leak information to the Ku Klux Klan, which was prepared to injure, maim, and kill any African American attempting to vote, threatening families and damaging property

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to ensure the registrant did not try again. (Lewis, 2012, p. 45–46)

Lewis (2012) also noted the role of the grandfather clause to ensure that literacy tests and voter registration applications in the South were created to disenfranchise Blacks. The grandfather clause assured that the majority of Blacks could not vote because their grandfathers had not been able to vote. The clause “permitted anyone who could vote on January 1, 1867, and his sons and grandsons, to continue to vote without passing the required literacy test” (Goldman, 2004, p. 617). Lewis notes, “Some states used what was called a ‘grandfather clause’ to retard our progress after the Fifteenth Amendment passed,” explaining, “Anyone whose grandfather had the right to vote before the Civil War could continue to exercise that right without any impediment” (p. 45). Similar clauses were found throughout the South, including the “understanding clause,” which stated that registrars could decide if a prospective voter had enough of an “adequate” understanding in order to bypass the literacy tests (Goldman, 2004, p. 617).

These types of unofficial laws and voter registration application processes were not unique to Selma, Alabama, and were used throughout the South. Between the literacy tests and the voter registration applications, White conservatives were successful in disenfranchising Blacks in the South. “In the Deep South, however, White resistance was fierce in many areas, particularly the rural ones: average Black registration in Alabama, Georgia, Louisiana, Mississippi, and South Carolina was only 22.5 percent of those eligible. In Mississippi, a mere 6.7 percent were registered” (Davidson, 1992, p. 13). Moreover, because these literacy tests could be applied at the sole discretion of White registrars, coupled with educational disadvantages and discriminatory clauses: “Many blacks did not even attempt to register, and those that did were denied access to the ballot in numbers that exceeded the number of blacks who were actually illiterate” (Goldman, 2004, p. 620).

### Methods: Researching Literacy Tests and Voter Registration Applications as Oppressive Technologies

Upon undertaking this research study, we sought out examples of literacy tests and voter registration

applications that intentionally disenfranchised Black voters during the late 1800s and early 1900s Reconstruction Era. We also sought to identify these documents as they were used through the Civil Rights Era and before the passage of the Voting Rights Act in 1965. One of the challenges of this study was locating an accessible archive of the actual documents. It is hard to determine why archives of literacy tests and voter registration applications were difficult to locate and validate. However, as Miller and Bowdon (1999) note, though archives and digitization of historical records provide access in new ways to texts and documents, there is still much concern as to who controls that access. In essence, “whoever controls access to archives controls the institutional memory of a culture,” and further, “whoever controls the editing of archival texts controls what those texts are taken to mean” (Miller & Bowdon, 1999, p. 595). Further, as asserted by Miller and Bowdon, as marginalized groups begin to cultivate, create, and maintain archives of documents that may have previously been unappreciated, undervalued, or even purposefully destroyed, “online archival research can [also] help us to develop new literacy strategies that citizens can use to challenge limitations on public access and representations of controversial issues in the public media” (p. 595). Ultimately, even though we found that locating validated examples of literacy tests and voter registration applications online was more tedious than we expected, we recognized that the scarcity of these documents in accessible archives is important to acknowledge. The scarcity of these documents emphasizes how texts and technologies can be used in rhetorically and materially oppressive ways in terms of the access and availability of texts. In this way, access to texts and technologies can be used for oppressive purposes by ignoring, burying, or making historical documents harder to access in attempts to make history more palatable.

For the purpose of our study, we were able to locate a website that included digitized versions of literacy tests and voter registration applications from the Civil Rights era. The Veterans of the Civil Rights Movement (CRMVet) website, maintained by Bruce Hartford, contains the most comprehensive collection of literacy tests and voter applications from the 1950s through 1960s. Although this website is not supported by a government agency, corporation, academic institution, or museum, the documents on this website do represent an archival collection, as defined by the Society of

American Archivist (Reitz, 2010). Hartford, a founding member of the National Writer's Union, former member of Congress on Racial Equality (CORE), and former member of Southern Christian Leadership Conference (SCLC) ([www.huffingtonpost.com/author/bruce-hartford](http://www.huffingtonpost.com/author/bruce-hartford)), describes the website as follows:

We ain't neutral. We make no pretense of academic "neutrality." We were freedom riders, and most of us remain so. This is our website where we speak for ourselves in our own voices. Therefore, all substantive material regarding the Freedom Movement on the CRVMVet site is from or by Movement veterans – as opposed to reporters, book authors, or other observers. This is not to disrespect them, but they have available many outlets and public venues for their work. We want this, our website, to reflect our point of view. ([www.crmvet.org/about1.htm](http://www.crmvet.org/about1.htm))

Although much of the site includes commentary on the civil rights movement, we used the website as a resource for government reports, CORE manuals, references to state and federal laws, and example literacy tests and voter applications. One example from the CRVMVet website is an Alabama literacy test and voter application form, as shown in Figures 1–4. The Application for Registration, Questionnaire, and Oaths of Alabama c. 1965, which, though four pages, is similar in scope and content to the other literacy tests on the website from Alabama, Georgia, Louisiana, Mississippi, and South Carolina. Since the Voting Rights Act of 1965 was signed the same year, this is an example of one of the last literacy tests used to disenfranchise Blacks in Alabama. Given its significance (location and timing), we use the Application for Registration, Questionnaire and Oaths of Alabama c. 1965 as a point of reference in describing the tasks users were asked to perform and the information they were asked to submit to register to vote in Alabama.

Our analysis of Figures 1–4, the Application for Registration, Questionnaire, and Oaths of Alabama c. 1965, includes two steps: Step 1) a surface-level reading of the document without consideration of McCornack's deceptive messaging criteria and Step 2) a critical rhetorical analysis of the documents using McCornack's deceptive messaging categories as criteria for analysis. Indeed, viewed in the historical context of

the Reconstruction and Civil Rights era, this reading of the texts (as oppressive and as purposely attempting to disenfranchise Black voters) was not difficult to identify. In the following section, you will find figures showing the structure and exact wording of the questions and texts on the documents. Even a surface-level reading, at the most basic rhetorical foundations, reveals the intent of the document and the authors of the text.

### **Textual Description of the Application for Registration, Questionnaire, and Oaths of Alabama (1965) as a Racially Neutral Document**

The following section provides the findings of the surface-level reading of the voter application for registration and the associated questionnaire and oaths. The findings below are not critical but provide a basic foundational description of the form and content of each document. A critical rhetorical analysis follows the surface-level descriptions.

#### **Part 1. Of Application for Registration, Questionnaire, and Oaths (1965)**

An initial reading of Part 1 of the Alabama voter registration (see Figure 1) would remind most readers of applications organizations use to obtain basic information regarding an applicant's identity. Part 1's fill-in-the blank format questions, completed by a Board of Registrars member or an authorized clerk on behalf of the applicant, takes up about half of the first page and queries the user for information regarding 1) identity, 2) residence, 3) military experience, and 4) education. The only question that differs from most job, credit, or student applications would be the question asking, "Have you ever been registered to vote in any other state or in any other county in Alabama?" followed by "If so, when and in what state and county and, if in Alabama, at what place did you vote in such county?" This question, along with questions regarding the applicant's identity, seem like appropriate questions from a County or State organization attempting to register an applicant to vote.

#### **Part II. Of Application for Registration, Questionnaire, and Oaths (1965)**

Part II of the form begins at the halfway point on Figure 1 and concludes near the bottom of Figure 2.

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APPLICATION FOR REGISTRATION, QUESTIONNAIRE AND OATHS

PART I

(This is to be filled in by a member of the Board of Registrars or a duly authorized clerk of the board. If applicant is a married woman, she must state given name by which she is known, maiden surname, and married surname, which shall be recorded on the last page.)

Full Name: Last \_\_\_\_\_ First \_\_\_\_\_ Middle \_\_\_\_\_

Date of Birth: Day \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

Business Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Voting Place: Precinct \_\_\_\_\_ Ward \_\_\_\_\_ District \_\_\_\_\_

Length of Residence in State: County \_\_\_\_\_ Precinct, ward or district \_\_\_\_\_

Are you a member of the Armed Forces? \_\_\_\_\_

Are you the wife of a member of the Armed Forces? \_\_\_\_\_

Are you a college student? \_\_\_\_\_ If so, where \_\_\_\_\_

Have you ever been registered to vote in any other state or in any other county in Alabama? \_\_\_\_\_ If so, when and in what state and county and, if in Alabama, at what place did you vote at each election? \_\_\_\_\_

Highest grade: 1 to 12, completed \_\_\_\_\_ Where \_\_\_\_\_

Years college completed \_\_\_\_\_ Where \_\_\_\_\_

PART II

(To be filled in by the applicant in the presence of the Board of Registrars without assistance.)

I, \_\_\_\_\_ do hereby apply to the Board of Registrars of \_\_\_\_\_ MONTGOMERY \_\_\_\_\_

County, State of Alabama, to register as an elector under the Constitution and laws of the State of Alabama and do hereby submit my answers to the interrogatories propounded to me by the board.

Signature of Applicant \_\_\_\_\_

1. Are you a citizen of the United States? \_\_\_\_\_

2. Where were you born? \_\_\_\_\_

3. If you are a naturalized citizen, give number appearing on your naturalization papers and date of issuance. \_\_\_\_\_

4. Have you ever been married? \_\_\_\_\_ If so, give the name, maiden and place of birth of your husband or wife. \_\_\_\_\_

Are you divorced? \_\_\_\_\_

**Figure 1. Application for Registration, Questionnaire, and Oaths of Alabama c. 1965, Page 1.** Source: <http://www.crmvet.org/info/litapp.pdf>

There are instructions at the top of this section that advise the applicant to complete this section. The first portion is confirmation of the applicant's intention to "submit my answers to the interrogatories propounded to me by the board" or to officially, under the authority of the Alabama Constitution, apply to vote in the state. There is also a stamp of the word "Montgomery," identifying this form as being administered by the Board of Registrars of Montgomery, County in Alabama. This space for a stamp suggests the form is used in more than one county in Alabama. This portion is followed by a request for the applicant's signature. The rest of Part II continues through the bottom of page 2 through page 3 and includes questions regarding 1) citizenship, 2) marital status and history, 3) residences over the past five years, 4) aliases, 5) current employment, including the name and address of current employer, 6) voter registration history, 7) detailed military history, 8) request for two references,

5. List the places you have lived the past five years, giving street or county seat name. \_\_\_\_\_

6. Have you ever been known for any name other than that on this application? \_\_\_\_\_ If so, state what name \_\_\_\_\_

7. Are you employed? \_\_\_\_\_ If so, state by whom. (If you are self-employed, state title.) \_\_\_\_\_

8. Give the address of your present place of employment. \_\_\_\_\_

9. If, in the past five years, you have been employed by an employer other than your present employer, give name of all employers and states and states to which you worked. \_\_\_\_\_

10. Has your name ever been placed for any reason on any list of persons registered to vote? \_\_\_\_\_ If so, when, where, and why? \_\_\_\_\_

11. Have you previously applied for and been denied registration as a voter? \_\_\_\_\_ If so, when and where? \_\_\_\_\_

12. Have you ever served in the Armed Forces? \_\_\_\_\_ If so, give dates, branch of service, and serial number \_\_\_\_\_

13. Have you ever been dishonorably discharged from military service? \_\_\_\_\_

14. Have you ever been sentenced legally to prison? \_\_\_\_\_ If so, give details \_\_\_\_\_

15. Give names and addresses of two persons who know you and can verify the statements made above by you relative to your residence in this state, county and precinct, ward or district. \_\_\_\_\_

16. Have you ever seen a copy of this registration application form before entering this copy today? \_\_\_\_\_ If so, when and where? \_\_\_\_\_

17. Have you ever been convicted of any offense or paid your fine for violation of the law? \_\_\_\_\_ (Yes or No. If so, give the following information concerning each fine or conviction: charge, to what court, when, fine imposed, sentence, and, if possible, year when, date of payment, state when. (If fine is for traffic violation only, you need write before only the words "traffic violation only".) \_\_\_\_\_

(Remainder of this form is to be filled out only as directed by an individual member of the Board of Registrars.)

PART III

Part III of this questionnaire shall consist of one of the forms which are Insert Part III at herein below set out. The insert shall be fastened to the questionnaire. The questions set out on the Insert

**Figure 2. Application for Registration, Questionnaire, and Oaths of Alabama c. 1965, Page 2.** Source: <http://www.crmvet.org/info/litapp.pdf>

9) a question asking if the applicant had seen "a copy of this registration form before today" and when, and 10) a criminal history question, including traffic violations.

### Part III. of Application for Registration, Questionnaire and Oaths (1965)

Part III of the form is written in very small text (smaller text than the rest of the form), so we will include the text of this portion of the application, which is located at the very bottom of Figure 2. Part III reads:

(Remainder of this form is to be filled out only as described by an individual member of the Board of Registrars.)

Part III of this questionnaire shall consist of one of the forms which are Insert Part III at herein below set out. The insert shall be fastened to the questionnaire. The questions set out on the Insert



shall be answered according to the instructions therein set out. Each applicant shall demonstrate ability to read and write as required by the Constitution of Alabama, as amended, and no person shall be considered to have completed this application, nor shall the name of any applicant entered upon the list of registered voters of any county until after such Inserted Part III of the questionnaire has been satisfactory completed and signed by the applicant.

Here, it appears that the reader, while in the presence of a registrar, is given an inserted page and required to insert/attach that page to the rest of the application. Based on the text of Part III, we assume the following: 1) the content of Part III is not static and changes from applicant to applicant, and 2) the purpose of Part III is to test the applicant's ability to read and write. At the top of page 3, there are about three inches

of white space reserved for the applicant's answers to the Insert from Part III of the application; the dedicated space is noted by "PLEASE INSERT PART III HERE."

#### **Part IV. of Application for Registration, Questionnaire, and Oaths (1965)**

Part IV, located directly below the space reserved for the Part III Insert, is at the top of Figure 3 and is the first section of the application that includes a section header, Oaths. Here, the applicant is given text (an oath) to swear that their answers given thus far are true, allegiance to the Alabama Constitution, and "[they are] not affiliated with any group or party which advocates the overthrow of the United States or the State of Alabama." The second portion of Part IV is titled "Explanation and Remarks" and is reserved for comments from registrars regarding applicants who are "physically handicapped" or who have "sight handicaps" and/or other clarifications for applicants unable to complete the form.

#### **Part V. of Application for Registration, Questionnaire, and Oaths (1965)**

Part V, titled "Action of the Board," is located on the top half page 4 of the application. (See Figure 4.) This section requires signatures of members of the board of registrars signifying their approval or rejection of the applicant's voter registration application. This section notes, "The act of actually determining an applicant entitled to be registered is judicial. A majority of the board must concur. A majority must be present. The power cannot be delegated. Each member must vote on each applicant. Not until this is done may a certificate be issued the applicant."

#### **Part VI. of Application for Registration, Questionnaire, and Oaths (1965)**

The final section of the application in Figure 4, Examination of Supporting Witness, is a fill-in-the-blank series of questions requiring the name, address, and polling place, and provides support or reference for the applicant. The instructions for this section state that the witness is placed under sworn oath and the oath is administered by a registrar or authorized substitute. This section requires signatures of both the witness and the person administering this final portion of the application.

PLEASE INSERT PART III HERE

PART IV  
OATHS

STATE OF ALABAMA  
COUNTY

Before me, \_\_\_\_\_  
a registrar in and for said county and state, personally appeared \_\_\_\_\_  
an applicant for registration as an elector, who being first duly sworn depose and say:

"I do solemnly swear (or affirm) that the foregoing answers to the interrogatories are true and correct to the best of my knowledge, information and belief. I do further personally swear (or affirm) that I will support and defend the Constitution of the United States and the Constitution of the State of Alabama; that I do not believe in nor am I affiliated with any group or party which advocates or advocates the overthrow of the United States or the State of Alabama by unlawful means. I do further solemnly swear (or affirm) that in the matter of this application for registration I have spoken the truth, the whole truth and nothing but the truth, so help me God."

\_\_\_\_\_  
Signature of Applicant

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

\_\_\_\_\_  
Signature of Board Member

EXPLANATION AND REMARKS

(Board members interviewing applicants may place here any special explanation, such as of residence status, or other remarks for purposes of clarification. If person is blind or is otherwise physically handicapped to such an extent that he cannot fill out this application form, the circumstances are to be recorded here, along with an explanation of the method used to determine if the person is, in fact, literate and can spell words and recognize those spelled to him, or can read large block letters and words in the case of persons with sight handicaps.)

**Figure 3. Application for Registration, Questionnaire, and Oaths of Alabama c. 1965, Page 3. Source:** <http://www.crmvet.org/info/litapp.pdf>

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**PART V**  
**ACTION OF THE BOARD**

STATE OF ALABAMA  
COUNTY \_\_\_\_\_

The applicant, \_\_\_\_\_, appeared before the board of registrars for said state and county in a regular session and executed the foregoing application in the manner prescribed by law. The Board, having examined and approved under oath, bearing his qualifications under section 141, Constitution of Alabama, as amended, and having fully considered the foregoing application for registration, questionnaire and oath, resolves said applicant entitled to be registered and he was duly registered this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

Signed: \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
Member  
\_\_\_\_\_  
Member

(NOTE: The act of actually determining an applicant entitled to be registered is judicial. A majority of the Board must concur. A majority must be present. The answer cannot be delayed. Each member must file on each application. This oath file is kept away a separate file board the applicant.)

The Applicant, \_\_\_\_\_, due to failure to meet the requirements of state law for registration as an elector, is hereby rejected on this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

Signed: \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
Member  
\_\_\_\_\_  
Member

**PART VI**  
**EXAMINATION OF SUPPORTING WITNESS**

(The witness must be sworn under oath to tell the truth, the person administering the oath being a board member or other person authorized to administer oaths and acting under the direction of the Board.)

Name of Witness \_\_\_\_\_  
Address \_\_\_\_\_  
Place of Voting \_\_\_\_\_

"I have known the applicant, \_\_\_\_\_, for \_\_\_\_\_ years and \_\_\_\_\_ months and I have personal knowledge that his place of residence is \_\_\_\_\_ and that he has resided in the State of Alabama at least one year and in \_\_\_\_\_ County for at least six months."

Signature of Witness \_\_\_\_\_  
Sworn to and subscribed before me this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

(Press administering Oath)  
Date \_\_\_\_\_

**Figure 4. Application for Registration, Questionnaire, and Oaths of Alabama c. 1965, Page 4.** Source: <http://www.crmvet.org/info/litapp.pdf>

### Critical Rhetorical Analysis of the Application For Registration, Questionnaire, and Oaths of Alabama (1965)

In our critical rhetorical analysis of the Application for Registration, Questionnaire, and Oaths of Alabama c. 1965, we used the information manipulation theoretical framework to identify textual and visual elements that served as intentional and covert violations of the Black prospective voter's expectations in relation to the quantity of information provided or requested, quality of information provided or requested, manner in which information was provided or requested, and relevance of information provided or requested (McCornack, 1992, p. 6). Table 1; Results of Rhetorical Analysis of the Application for Registration, Questionnaire, and Oaths of Alabama; highlights elements of the document written and designed to facilitate disenfranchisement of prospective Black voters:

Parts I-VI of the Application for Registration, Questionnaire, and Oaths of Alabama appear somewhat straightforward without the testimonies of activists who studied and observed the actual consequences of submitting what seemed like harmless information (i.e. employment information, questions regarding if applicants had attempted to register to vote before, home addresses). However, in practice, this information was used as a form of surveillance (quite literally a way to identify and track Black citizens involved in voting rights and Black citizens seeking to exercise their rights to vote) and intimidation. Like Black codes and Jim Crow laws, which appeared racially neutral (Williams, 2010), literacy tests and voter application served as a completely different means of data collection for boards of registrars. McCornack's (1992) information manipulation theoretical framework helps us to understand how Black applicants who attempted to register to vote were deceived in the quantity of information, quality of information, manner of information, and relevance of the information provided (and solicited) in oral and written communication. Registrars solicited more personal information from Blacks than Whites, Blacks were not informed of how this information was actually used, questions posed to Blacks regarding the Constitution were more rigorous than information required from White applicants, and information requested from Blacks had little to do with the voting process. In this way, the application for registration form and registration process are examples of information manipulation or intentional deception.

### Moving Forward and Pushing Back: Technical Communication as Tools of Resistance

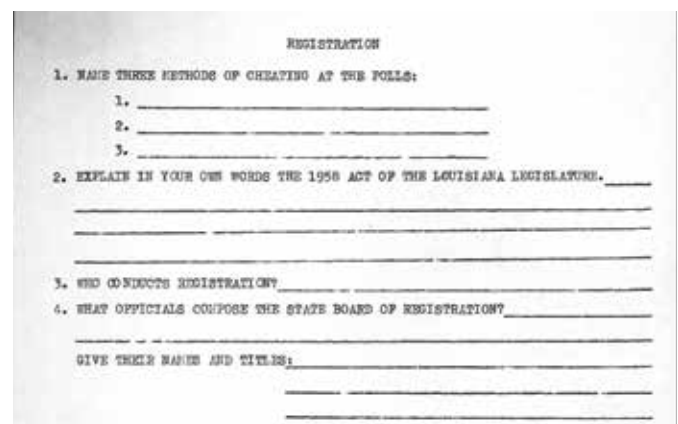
As detailed above, texts and technologies deployed with the express intent of oppressing and disenfranchising was a reality that impacted Blacks desiring to vote in very real and material ways. These texts are illustrative of technical communication that functions as tools of oppression. However, in the most oppressive of times, networks of individuals, activists, and agitators develop ways to resist dominance. In 2016, with the election of our 45th President, the United States experienced a swell of groups whose sole purpose was to resist changes being implemented in the government that were seen as discriminatory, biased, racist, sexist, and

xenophobic. Perhaps some of the most vociferous resistance has come from those already marginalized. For example, groups like Black Lives Matter, an activist organization created by three Black, queer women in 2013 after the death Trayvon Martin, an unarmed Black teenager in central Florida, became more visible and vocal about the need to protect Black lives in every aspect (social, cultural, political, and embodied). However, it is important to note that resistance is not new and has been happening as long as oppression has occurred (for example, see Epps-Robertson, 2015). In fact, marginalized communities have a long history of subverting and working around texts and technologies deployed as tools of oppression.

During Reconstruction and the years following, in which literacy tests and voter registration applications were prevalent, activists worked to find ways to circumvent discriminatory laws and practices, often resulting in organizations creating their own texts. For example, the Congress of Racial Equality (CORE), made up of an interracial group of primarily young college student-activists, was established in Chicago in 1941 with the purpose of encouraging “personal nonviolent direct action to end discrimination” (Rich, 1965, p. 113). Initially, CORE chapters formed in 19 cities across the US and in the 1960s initiated Freedom Rides to southern states (Purnell, 2013). In the mid 1950s, CORE had turned its attention to the issue of voting and, by the mid 1960s, had facilitated registration of 31,000 Black voters in South Carolina within two years (p. 117). Despite localized efforts in South Carolina and other states, CORE’s resistance was to national and federally sanctioned and supported oppression. Rich notes that the work CORE was doing in 1965 was “an outgrowth of the effort to defeat Goldwaterism” (p. 117). Goldwaterism, derivative of the name of the conservative Republican Barry Goldwater, was marked by a desire to continue segregation in the United States and halt the passage of the Civil Rights Act of 1964. In other words, CORE sought to resist racist politics and policies by working around the voter registration laws of the time. In their resistance, CORE used texts designed to empower and provide disenfranchised Black voters with the information they would need to circumvent racist policies.

CORE organizations were established in a number of states in the US, both north and south. In Southern states, some CORE organizations created their own

form of technical communication in order to subvert voting restrictions and regulations. For example, a CORE group in Louisiana created booklets for Black voters to help educate them on voting process and policies (<http://www.crmvet.org/info/la-vr-training.pdf>), as in Figure 5. These booklets were created despite a “serious shortage of paper (and money)” (<http://www.crmvet.org/info/la-vr-training.pdf>). The booklet discussed how registration worked, and explained voting qualifications and disqualifications, and party affiliations. Designed as an educational tool, the booklet provided tutorials and then followed up with a quiz-style questionnaire page that allowed potential voters to test what they had learned in the proceeding lessons. Essentially, CORE created its own technical communication in an act of resistance to texts used as tools of oppression.



**Figure 5. Louisiana CORE manual.** Source: <http://www.crmvet.org/info/la-vr-training.pdf>

A voter registration manual from Georgia is even more forthright and direct in its assertion that the goal of the document is to organize disenfranchised citizens and win the right to vote. In fact, the Georgia manual focused on project planning and coordinating meetings and groups in order to help organize citizens. For example, the Georgia manual, part of which is shown in Figure 6, includes notes about how to run a meeting, how to form committees, and shows hand-drawn maps, outlining voting districts. By informing potential voters of how voting processes work, including how districts are geographically located, these manuals served as teaching tools for Black citizens aiming to exercise their right to vote. The manual is an example of technical communication developed and distributed

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**Table 1. Results of Critical Rhetorical Analysis of the Alabama Application for Registration, Questionnaire, and Oaths of Alabama**

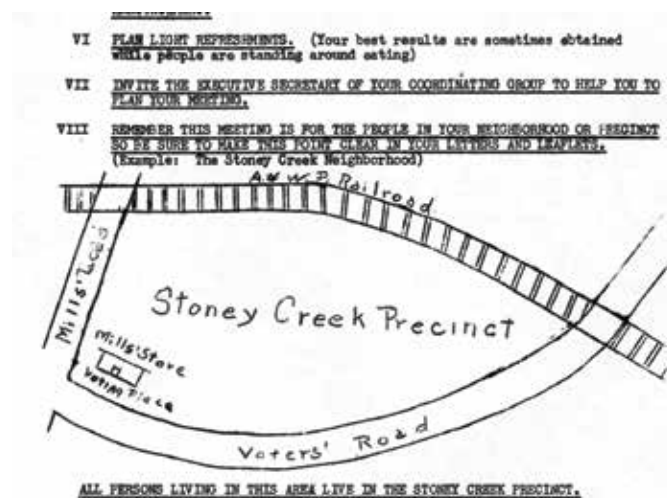
	Part I	Part II	Part III
<b>Quantity</b> (amount of information)	Although it is obvious that the application is administered by members of the Board of Registrars or their representative, the form does not include a logo or stamp referencing the body responsible for creating the document.	This section contains 17 questions, many of which are followed by “if so” prompts that require recollection of dates, names, locations, and requests for “details” and/or “why” responses that may require the applicant to return home to gather additional information.	The amount of text from the Constitution that the reader is required to read and write is provided in person, is not static, and may change based on the applicant and administrator.
<b>Quality</b> (usefulness of information)	Questions regarding applicants’ previous voting records were used to identify Black voters who had attempted to vote in other counties and, despite being denied, continued to pursue voting rights.	Questions regarding residence and employment were used as a means of surveillance and to intimidate Black voters and workers whose landlords or employers were opposed to Black voting rights. They could lose their homes and jobs if they persisted in attempts to register.  Questions regarding whether the applicant had seen the application before were attempts to identify Blacks who had received voting rights training from civil rights groups.	The difficulty level and legibility of the Constitution that the reader is required to read and write is provided in person, is not static and may change based on the applicant and administrator.
<b>Manner</b> (tone and presentation of information)	Presented as racially neutral but not administered to White Alabama residents who were exempt from literacy tests through a “grandfather clause.”	Presented as racially neutral but not administered to White Alabama residents who were exempt from literacy tests through a “grandfather clause.”	Presented as racially neutral but not administered to White Alabama residents who were exempt from literacy tests through a “grandfather clause.”
<b>Relevance</b> (appropriateness of information)	Questions prompted applicants for information regarding educational level, which had no bearing on voter registration.	Of the 17 questions in this section, questions regarding marital status, history of employment, and requests for references “to verify the statements made above” were inappropriate and unfair requirements.	Requesting that Black prospective voters demonstrate the ability to read and write parts of the United States Constitution, while exempting illiterate Whites, is evidence that literacy was an inappropriate and unfair requirement.



	Part IV	Part V	Part VI
<b>Quantity</b> (amount of information)	The Explanation and Remarks section of Part IV section was used by Board members to comment on "blind or otherwise" handicapped" applicants and to explain what methods the Board used to determine literacy in these cases. While this section appears to collect an important amount of information for the sake of inclusivity, it also serves to reinforce the racially neutral and fair tone of the document.	In small font, the document states "NOTE: The act of actually determining an applicant entitled to be registered is judicial. A majority of the board must concur. A majority must be present. The power cannot be delegated. Each member must vote on each applicant. Not until this is done may a certificate be issued the applicant." There is no statement regarding how often the board convenes, how long an applicant must wait for a decision, or mention of an appeals process.	This section is administered by the Board to a witness speaking on behalf of the applicant. The signatures of the Board member (or their authorized agent) as well as the witness is required. The document does not reference any conditions/ stipulations regarding who may or may not serve as a Board member or a witness.
<b>Quality</b> (usefulness of information)	The required reading of the "Oaths" section of Part IV requires that the applicant affirm allegiance to the country and state and confirm that they are not affiliated with groups or parties that might "overthrow" the United States or the State of Alabama. During this period, civil rights activists' attempts to resist Jim Crow laws were met with government-supported violence, a reaction to attempts to change the status quo.	In practice, Boards were known to delegate as few as two days a month to administering voting applications. If there were not enough board members present to sign and approve the application on the few days devoted to administering forms, applicants were unable to complete the application process.	Although this section does not appear arduous if read to the witness by the Board member, there is no mention of whether the witness needed to be a registered voter. In situations where there were few Black registered voters, it would prove difficult for Black applicants to obtain a White witness willing to sign on their behalf.
<b>Manner</b> (tone and presentation of information)	Presented as racially neutral but not administered to White Alabama residents who were exempt from literacy tests through a "grandfather clause."	Presented as racially neutral but not administered to White Alabama residents who were exempt from literacy tests through a "grandfather clause."	Presented as racially neutral but not administered to White Alabama residents who were exempt from literacy tests through a "grandfather clause."
<b>Relevance</b> (appropriateness of information)	Requesting that Black prospective voters demonstrate the ability to read the Oath, while exempting Whites, is evidence that this portion of the application was an inappropriate and unfair requirement.	Requesting that Black prospective voters' registration process be dependent on a majority vote of three-person Board, while exempting Whites from this process, is evidence that this portion of the application was an inappropriate and unfair requirement.	Requesting that Black prospective voters provide a witness to support their application to vote, while exempting Whites, is evidence that this portion of the application was an inappropriate and unfair requirement.

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with the express purpose of resisting state-sanctioned disenfranchisement. Epps-Robertson's (2015) study of the Free School provides another example of the ways in which marginalized populations pushed back against White supremacist laws through the use of education and instructive texts and documents. The voter registration manuals, documents, and resistance work by CORE point to not only texts and technologies as one approach for resisting but also highlight the ways in which, as Epps-Robertson notes, teaching and the texts used to support pedagogy can be "an act of activism" (p. 91).



**Figure 6.** Page from 1962 Citizenship Clinic Manual for Georgia Voter Registration. Source: [http://www.crmvet.org/info/gavr\\_manual.pdf](http://www.crmvet.org/info/gavr_manual.pdf)

### Conclusion and Implications for Technical Communication

Understanding that technical communication is not neutral or apolitical, scholars in the field have begun to explore the ways in which technical communication (scholarship, pedagogy, and practice) has been complicit in the oppression of others. Jones, Walton, and Moore (2016) assert that technical communicators must reckon with issues of power, positionality, and privilege in order to fully identify and push back against social injustice. Further, Rose and Walton (2016) acknowledge that the ways in which we use documents and technologies are also affected by unchecked bias and prejudices. In fact, Rose and Walton (2015) note the beginnings of shifts in the areas of usability and human-centered design that encourage scholars to

engage with the concept of "democratic empowerment" (Clement, 1996). This orientation asks scholars and practitioners to consider the ways in which design can reify and promote oppression and impact the lived experiences of marginalized populations. "It is oppressed people whose participation is often overlooked and, intentionally or unintentionally, prevented from informing affairs that affect them" (Rose & Walton, 2015, para 7).

An important lesson that technical communicators (in industry, government, and academia) can learn from this study is that forms and applications used in the very process of oppression and discrimination will not seem out of the ordinary. The style of writing will not read as aggressive or disrespectful, the document design will not appear unprofessional or unfamiliar, and the delivery will be incorporated into a process supported by enforceable and legitimate laws. Our challenge as technical communicators is to know how to respond if asked to write, design, or distribute information used to facilitate oppression and discrimination. Today, as we write this article, we can only imagine what types intake forms and documentation are being used to facilitate the separation of migrant children from their parents in South Texas or what documents and forms were used to support a travel ban for Muslims by the current Presidential administration. History shows us that laws, regulations, and technical and legal documents do support and enforce civil rights infringements and human rights atrocities. Examining historical documents in our field underscores the ways in which technical and professional communication can be used and have been used to uphold oppressive power structures and implement harmful and oppressive practices. It needs to be clear that technical communication is not always in service of empowerment or user-agency. Sometimes, texts and technologies are purposefully oppressive. Acknowledging that texts and technologies are not always designed with good faith or good will in mind, scholars and practitioners can begin to look for opportunities to design texts and tools for resistance. As stated above, resistance through texts and technologies is not new. As such, technical communicators must consider not only what technologies and texts are designed to do but how they are actually used in practice and how to identify the opportunities, places, and obligations to intervene.

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# Designing Outrage, Programming Discord: A Critical Interface Analysis of Facebook as a Campaign Technology

By Jennifer Sano-Franchini

## Abstract

**Purpose:** Facebook is a place where political candidates actively advertise and campaign, and where a large population of citizens share and interact with information about political issues and with one another. I explore how Facebook's UX/interface design has contributed to user engagements that have implications for the current political context within which we live and work.

**Method:** I engage in a critical user interface analysis focusing on four key microinteractions on the site: browsing, reacting, commenting, and posting.

**Results:** My analysis shows that Facebook's user interface is structured around several design choices that create an ethic that prioritizes concision, speed, curation practices that limit divergent perspectives, and the flattening of complex identities and political commitments such that they are indexable, processable, and thus, monetizable.

**Conclusion:** The analysis presented here considers the relationship between user experience design and political engagement. As such, this paper helps industry practitioners to see 1) how technology designs create new, mediated intimacies over time and 2) how those relationships have implications for user engagement with politicized content.

**Keywords:** social media, politics, user experience, interface design, microinteractions

## Practitioner's Takeaways:

- Suggests that UX designers should be attentive to how technology designs create new relational circuits, along with how those relationships work to mediate the dissemination of politicized content.
- Examines the potential impacts of a social media interface on its audiences.

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Conversations around U.S. electoral politics since Barack Obama's 2008 presidential campaign have centered in large part on a social networking site once designed to bring college students together. Facebook has become a source from which a significant number of voters and potential voters, at least in the U.S. context, receive news and information about candidates and political issues (Mitchell, Gottfried, & Matsa, 2015; Gottfried & Shearer, 2016; Desilver, 2014). Correspondingly, there exists a growing body of scholarship that explores the relationship between Facebook and political participation emerging across communication, new media studies, sociology, and public relations (Carlisle & Patton, 2013; Effing, van Hillegersberg, & Huibers, 2011; Gil de Zuniga, Jung, & Valenzuela, 2012; Gustafsson, 2012; Sweetser & Lariscy, 2008; Vesnic-Alujevic, 2012; Vitak et al., 2011). Although the term "election technology" is often used to reference *voting* technologies, such as on-site voting equipment and election management systems, it must be noted that election campaigns are an integral part of the electoral process ("Presidential Election Process," 2018). As social media has played an increasingly significant role as a campaign technology, there emerges a need to examine the fluid relationship between user experience (UX) design of social media and what happens in the polling booth.

The gravity of that relationship was highlighted in recent controversies surrounding the 2016 U.S. presidential election of Donald Trump, including the indictment of twelve Russian intelligence officials for interfering in the election, as well as the Cambridge Analytica data breach scandal. These events have raised urgent questions regarding Facebook's role in both advancing and inhibiting electoral integrity and thus in shaping election outcomes. While some have examined how Facebook enabled Russian hackers and troll farms to disseminate "fake news" during the 2016 U.S. presidential campaign (Allcott & Gentzkow, 2017), others have considered how algorithms and the click economy facilitated that dissemination (Lapowsky, 2016). To be sure, Facebook is not the only social media site that has been implicated in discussions about the propagation of disinformation online. At the same time, it has perhaps most frequently been identified as a key factor that contributed to a Trump presidency. Trump's digital director himself, Brad Parscale, said that the Trump campaign benefitted from targeted advertising on Facebook, which was also the campaign's "biggest

incubator" that allowed them to generate \$250 million in online fundraising (Lapowsky, 2016). It is therefore important to note that Facebook has not only enabled but also profited from dis-/misinformation (Leonnig, Hamburger, & Helderman, 2017) as it "actively ... pursued election advertising as a business strategy" (Beckett, 2017).

The case of Russian interference in the 2016 election has highlighted how Facebook's business strategy was exploited as a political tool for sowing outrage, fear, and distrust on social media. Roger McNamee (2017), venture capitalist and early investor in Facebook, argued that Facebook (and Google) incentivizes harmful behaviors in its pursuit of profit via users' attention, and that it does so by prioritizing sensationalism, fear, and outrage over substance or enrichment in order to keep users on the site. McNamee (2017) further asserted that Russia took advantage of this business model "to sow discord among Americans and then to interfere in the 2016 election" (para. 13). This assertion was later confirmed in the February 2018 indictment of Russia's Internet Research Agency (IRA) for interference in the 2016 U.S. presidential elections: The indictment states that the IRA "had a strategic goal to sow discord in the U.S. political system, including the 2016 U.S. presidential election" by posting "derogatory information about a number of candidates, and by ... supporting the presidential campaign of then-candidate Donald J. Trump ... and disparaging Hillary Clinton" through fraudulent political advertisements and fake social media accounts (p. 4). In addition, the indictment states that the IRA aimed to "[spread] distrust towards ... the political system in general" (p. 6). Such statements highlight how Facebook succumbed to—and profited from—"bad actors" through psychosocial means, by re-programming the emotions and affective orientations through which users interacted with digital content, with one another, and with the political system in ways that are visceral and deeply embodied. This notion is important for UX designers, especially if we consider how this social and affective re-programming—and its subsequent disruptions to democracy in the US—took place through Facebook's user interface (UI). But how do social media interfaces shape how we interact with—and feel about—one another? This paper takes the case of Facebook to explore this question, asking:

- If Facebook's UI is the medium through which particular interactions and affective orientations are facilitated, how are those activities and dispositions inscribed in and through the interface itself?
- What kinds of interactions and affective orientations are facilitated by Facebook's UI, and how might those interactions and orientations contribute to how citizens engage politically?
- Finally, what can UX designers do to more fully account for the political implications of design?

The section that follows is a literature review that situates this research in relation to existing scholarship on Facebook and its effects on politics and emotion. I then describe my research methods. Specifically, I engage in a critical user interface analysis with a focus on four key microinteractions (Saffer, 2013) as mediated by Facebook's UI: browsing (or scrolling), commenting, reacting, and posting. Furthermore, my analysis is theoretically framed in terms of interaction design's focus on user experience and emotion, along with the assumption that writing and design are epistemic. Next, I describe my analysis, before moving into a discussion of my findings. In brief, I find that Facebook's UI creates spatiotemporal realities that prioritize concision, speed, curation practices that limit divergent perspectives, and the flattening of complex identities and political commitments such that they are indexable, processable, and thus, monetizable. In addition, such design features are conducive for promoting polarization and discord among users. I conclude by describing the implications of this research for practitioners and scholars, encouraging that both be vigilant in considering how technologically mediated social interactions materially re-shape how users connect and relate with one another both online and offline.

## Literature Review

This paper serves as a response to salient arguments within the field of technical communication to more boldly take up the call of social justice (Agboka, 2013; Agboka, 2014; Colton & Holmes, 2018; Jones, 2016; Jones, Moore, & Walton, 2016; Walton & Jones, 2013). By examining how the work of UX designers has significant implications for upholding and/or disrupting democracy, and for enabling and hindering equitable representation of citizens within

the democratic process of an election, this paper speaks to social justice concerns of collective action in the name of equity. For instance, Jones, Moore, and Walton's (2016) 3Ps heuristic—positionality, privilege, and power—speaks to this case in terms of the need to observe the *positionality* of Facebook users and how they are configured to accept and maintain particular kinds of relationships, whether to other users, to political candidates, to political perspectives, or to advertisers in general. The 3Ps heuristic also demonstrates how this UX work speaks to the *privileges* of the state and of corporations in disseminating information that affect users' embodied and material existences in ways that affect the flow of *power*.

In addition, this paper builds from and contributes to the existing literature on social media and technical communication, which has explored uses of social media in managing workflow (Stolley, 2009; Pigg, 2014; Kimme Hea, 2014; Ferro & Zachry, 2009), in risk communication (Ding & Zhang, 2010; Potts, 2013), in considering work opportunities for technical communicators (Katajisto, 2010; Frith, 2014; Longo, 2014), to manage company-consumer interactions (Lillqvist & Louhiala-Salminen, 2014), and in the teaching of technical communication (Bowdon, 2014; Lam, 2013; Verzosa-Hurley & Kimme Hea, 2014; Vie, 2017). Although these studies have examined social media and/as technical communication in many domains, there is still room for work that considers how social media UIs impact user experiences, mindsets, and dispositions as they interpret information. In other words, this paper speaks to St. Amant and Meloncon's (2016) finding that technical communication practitioners are interested in "how technical communicators should use newer forms of media (e.g., social media) to convey information" (p. 354). More specifically, one practitioner interviewee asked, "How much is social media playing a part in how documents/information are viewed in that medium?" (p. 354). This examination of how Facebook's UI inspires particular affective responses in users that shape their engagement with that information and with each other is a contribution that addresses this question.

By exploring the research questions stated in the introduction above, this paper brings together two areas of inquiry that have taken up how Facebook motivates, influences, and/or directs users' behaviors within and outside of the social media platform:

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1) it contributes to the robust body of cross disciplinary scholarship that seeks to understand the relationship between Facebook and politics (Alashri et al., 2016; Borah, 2016; Bosch, 2013; Bossetta et al., 2018; Chang et al., 2018; Chen & Chang, 2017; Edgerly et al., 2016; Housholder & LaMarre, 2014; Jang et al., 2014; Khairuddin & Rao, 2017; Lee et al., 2018; Kim, 2016; Kim, 2018; Kruikmeier et al., 2016; Langlois et al., 2009; Lin, 2016; Gustafsson, 2012; Stier et al., 2018; Taibi et al., 2017; Van Dalen et al., 2015; Wang & Silva, 2018; Yang et al., 2017; Yue et al., 2017; and others) by centering on affect and emotion as an analytic and factor that contributes to the shape of this relationship; and 2) it adds to cross disciplinary research on the embodied—and thus psychosocial and neurological—effects of Facebook (Achen, 2016; Amichai-Hamburger & Vinitzky, 2010; Aricak & Ozbay, 2016; Bayer et al., 2018; Bessi, 2016; Bessi et al., 2016; Blachnio & Przepiórka, 2018; Bogolyubova et al., 2018; Brailovskaia & Margraf, 2017; Buchanan, 2015; Burwell, 2018; Calancie et al., 2017; Cionea et al., 2017; Çapan & Sarıçalı, 2016; Errasti et al., 2017; Hanna et al., 2017; Kim & Lee, 2011; Knausenberger & Echterhoff, 2018; Koban et al., 2018; Krishna & Kim, 2015; Lin & Utz, 2015; Meshi et al., 2015; Montag et al., 2017; Runcan, 2017; Seargeant & Tagg, 2018; Shackelford, 2018; Spottswood & Hancock, 2016; Stefanita et al., 2018; Tromholt, 2016; Verduyn et al., 2015; Vitak & Kim, 2014; Waterloo et al., 2017; Wee & Lee, 2017) by considering the political implications of mediated emotions, affects, and social behaviors as imparted by—and visible in—the UI.

Research on the political effects of Facebook is still emerging, and more studies are needed to better understand this impact in different cultural contexts. For example, in “Does Social Media Use Really Make People Politically Polarized?” Lee, Shin, and Hong (2018) reported on a South Korea-based study that found that “although there were no direct effects of social media use, social media indirectly contributed to polarization through increased political engagement ... which eventually pushes the users toward the ideological poles” (p. 245). In other words, the researchers found that those who were already politically moderate did not become more extreme in their views; however, those who considered themselves politically neutral did become politically engaged through the use of social media. Interestingly, those

who were politically neutral “who used social media regularly during the data collection period were more likely to become liberal than those who did not use social media” (p. 251). On the other hand, Yue et al. (2017) conducted a Hong Kong-based study that found “there is no causal correlation between online duration of Facebook and offline political participation” (p. 426). Correspondingly, Gustafsson (2012) presented findings from a Swedish perspective, stating, “Although practices and attitudes vary, using social network sites alone does not drive previously inactive respondents to political participation” (p. 1). Besides the variable that different national and cultural sites might contribute to the divergent findings that appear across these studies, it is also worth noting that research on Facebook is something of a moving target, and that Facebook’s UI as well as the political climate has undergone many updates and changes between Gustafsson’s 2012 study and Lee, Shin, and Hong’s 2018 study. In addition, some variations may exist due to the fact that Facebook presents personalized News Feeds. Therefore, any results may be contingent on the content that shows up on an individual user’s feed.

Examples of existing work at the nexus of Facebook, political elections, and emotion include Wang and Silva’s (2018) “A Slap or a Jab: An Experiment on Viewing Uncivil Political Discussions on Facebook,” which found that “a strong negative emotional experience after viewing uncivil political discussion [that expressed insults or mockery] did motivate ... participants to express stronger intention to engage,” but that the effects also depended in part on the topic at hand (p. 76). Furthermore, they found that different types of “uncivil” political discourse have “different affective impacts on audiences across political issues” (p. 78). In addition, Kim’s (2016) “Facebook’s Spiral of Silence and Participation: The Role of Political Expression on Facebook and Partisan Strength in Political Participation” reported on a South Korea-based study that found that “a perceived hostile opinion climate on Facebook was negatively associated with political expression on Facebook,” particularly for those who expressed low to moderate levels of political partisanship (p. 696). This finding is notable when examined in relation to Verduyn et al.’s (2015) study, which suggested that passive consumption of Facebook “undermines affective well-being” (p. 480). Finally, Taibi, Hussin, and Ishak’s (2017) “Facebook



and Political Cynicism: Undergraduates' Perception" presents a Malaysia-based study that found that undergraduates expressed neutrality and were thus assumed to be undecided about politics in their country. This finding suggests that how Facebook, politics, and emotion come together for a particular individual may also be contingent on other factors like age, educational background, and/or their perceived degree of political agency within a particular context. Examining these studies collectively offers several caveats that one should keep in mind when researching the political and affective impacts of Facebook. I describe such limitations for the current study in the section that follows.

First, however, it is worth noting that the existing literature on Facebook as a political tool has highlighted how the social media platform has been deployed as a liberatory and democratizing tool in several localized contexts, oftentimes acting as a space for dissent and community building. In many ways, social media enables the amplification of perspectives and voices that were previously omitted from official media channels that tend to be dominated by state and corporate interests. It seems increasingly apparent, however, that we must recognize that oppressive state and corporate interests, too, permeate social media technologies. The effects of Facebook's UI and business model should therefore not be assessed in good/bad binary terms; rather, the critiques presented in this paper should be understood as situated within a larger terrain of possibilities that are multifaceted, complex, and in flux.

## Methods

To understand how Facebook's UI impacts how users interact with—and feel about—one another, as well as the political implications of these mediated affective orientations, I look to the UI itself, engaging in what I refer to as a critical interface analysis, a method that layers theory, critique, and reflection. In doing so, I draw on theories from writing studies and interaction design. More specifically, I perform my analysis with a focus on four key overlapping and interconnected microinteractions (Saffer, 2013) as mediated by the site: browsing, reacting, commenting, and posting. In addition, my analysis is informed by my personal experience as a Facebook user since 2006, as a social media user since around 1997, and as a former graphic designer.

My method of critical interface analysis is constructed from the idea that writing and design are epistemic, and that human beings make knowledge and meaning from the interpretation—whether conscious or subconscious—of signs, including alphabetic textual and visual design. In addition, critical interface analysis is built from a tradition of scholarship that has explored the ideological function of technological interfaces in technical communications (Knight et al., 2009; Moses & Katz, 2006; Selfe & Selfe, 1994; Sidler & Jones, 2009; Tufte, 2003). As Selfe and Selfe (1994) have argued, "Within the virtual space represented by these interfaces, and elsewhere within computer systems, the values of our culture—ideological, political, economic, educational—are mapped both implicitly and explicitly, constituting a complex set of material relations among culture, technology, and technology users" (p. 485). A critical interface analysis blends theory, critique, and reflection on embodied experience in a recursive fashion, understanding that the relationship across the three can lead to an intentionally reflexive critical approach. A critical interface analysis can be used to analyze the ideological and rhetorical function of design via a computer desktop or other technical interface (Selfe & Selfe, 1994), software or application interface (Moses & Katz, 2006; Tufte, 2003), or website (Knight et al., 2009; Sidler & Jones, 2009). To perform a critical interface analysis, one might consider several questions about the meaning making function of the site:

- Who is the target/primary user? Who are the secondary users, unintended users, and other stakeholders?
- What are the tasks, interactions, and relationships (human-computer, human-human) that are facilitated by and through the interface?
- What kinds of content are presented through the interface?
- What are the organizing logics of the interface?
- What are the ideological and cultural values and assumptions imparted through the interface, whether through its content, its organizing logics, or the interactions facilitated by the site?
- In what kinds of environments will these tasks be conducted and these interactions take place?
- What are the various affordances of the interface? Who benefits from its use and how do they benefit? What are the limitations of the interface? What and whom does it leave out?

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- What are the range of emotions and embodied responses that are enabled and encouraged by the interface?
- On what memories, literacies, and histories does the interface rely?

For this study, my critical interface analysis is further supported by ideas in interaction design that examine processes of technology use over time. Specifically, I draw on Saffer's (2013) concept of microinteractions as activities that enable the dissemination of—and shape engagement around—politicized content. Saffer (2013) described microinteractions as “the functional, interactive details of a product” (p. 3), “a contained product moment that revolves around a single use case ... the small moments that can be dull and forgettable, or pleasurable and engaging. Every time you change a setting, sync your data or devices, set an alarm, pick a password, turn on an appliance, log in, set a status message, or favorite or Like something, you are engaging with a microinteraction” (p. 2). By attending to these four microinteractions of browsing, reacting, commenting, and posting, I examine the small, apparently commonplace uses of the site, and I consider how these small design features have much larger implications as they shape user engagement with politicized content as well as their interactions with other users. Drawing from Vitak et al. (2011), Facebook users are able to engage in several political and election-related microinteractions on the site: 1) They can join and leave Facebook groups like The Political Resistance Against Donald Trump, Right Wing News, Conservative Politics, or Being Libertarian; 2) they can become a “fan” of a candidate; 3) they can send private messages about political content; 4) they can add or delete political applications; and 5) they can RSVP for political events. In addition, Facebook users can change or put a filter on their profile pictures to show their commitments to particular issues, and they can donate to various political causes. For the purposes of this paper, however, I focus on political and ideological activity via four fundamental microinteractions that perhaps represent some of the most basic and common uses of the site.

A central premise of interaction design argues for the need to account for embodied experiences of emotion, affect, and feeling as significant to research,

analysis, and design. For example, interaction designers have argued that UX designers must go beyond usability and ease of use to consider the emotional impacts of design, in part because usability and emotion are interconnected (Klemmer et al., 2006; Lim et al., 2008; Norman, 2004; Norman & Ortony, 2003; Spillers, 2004). As Norman (2004) put it, “Emotions, we now know, change the way the human mind solves problems—the emotional system changes how the cognitive system operates” (p. 18). With this relationship in mind, my analysis is shaped by my own embodied experiences as a Facebook and social media user. I have been a member of Facebook for more than a decade now, having signed up for an account in 2006 when it was open only to those with college email addresses. Since then, the site's user base, functionality, and features have expanded dramatically. I have used the site at varying levels of intensity, at times posting various kinds of content regularly, at other times mostly browsing and “reacting,” and commenting on occasion. I have also used the site for a range of purposes, including, at times, to post politicized content, react to politicized content, and/or engage with other users around politicized issues. Like many other Facebook members, I have deleted my account—as it happens, not long after the 2016 election—and returned a couple of months later. Prior to using Facebook, I was an active member of some of the earliest social networking sites that featured user profile pages, including AsianAvenue, Friendster, and MySpace, since around 1997. I consider my experiences with—and uses of—Facebook in relation to the functionality and interfaces of other social networking sites. In sum, I draw on my personal experiences as a member of Facebook over the last decade or so and as a social networking site user over the last two decades to critique my experience of politicized and other content on Facebook.

The impetus for this project began in late April 2015. I was participating in a new media seminar for faculty at my institution. That week, we read McCloud's (1993) “Time Frames,” which performs a meta-analysis of time as represented within the genre of comics, alongside Berners-Lee, Cailliau, Luotonen, Nielsen, and Secret's (1994) “The World-Wide Web,” which describes the now ubiquitous system that enables widespread access to information across servers and platforms. Both readings considered how interfaces shape UX, as McCloud (1993) analyzed the interface of comics

as a form, while Berners-Lee et al. (1994) discussed aspects of the World Wide Web interface that would enable widened user access to information. At around the same time, I had been reading about the April 18–24 uprisings in Baltimore after the death of Freddie Gray and about the April 25 earthquake in Nepal. I noticed I was experiencing these events in ways unlike I had ever experienced world events in the past. This culmination of readings, world events, and experiences led me to wonder how time is encoded within social media applications and how the interpretation of world events are framed through these platforms. I took a screen capture of my Facebook News Feed on April 30, 2015, and wrote a blog that day, reflecting on my own embodied experience of temporal dissonance while using Facebook at the time. I have since reflected on my Facebook use and looked back on the site several times for the purpose of this study in 2017 and 2018, spoken informally with other Facebook users, and observed posts by my Facebook connections that have addressed issues of alienation, depression, and grief in relation to their use of Facebook and social media more generally.

To be clear, although this paper focuses on user experience (UX), it does so through means that may be seen as outside of typical UX research methods that generally call for consulting, observing, or otherwise engaging technology users directly. Instead, I make the case for drawing on *humanistic* methods of theory-based textual analysis and personal reflection—albeit, by a user-researcher—to come to a more complete understanding of how human beings make meaning from UX design. Doing so offers a strong starting point for interrogating challenging questions about politics, culture, and ideology in UX for several reasons. First, users are not always self-aware of the ideological and epistemological implications of their experiences with digital technologies, nor are they always reflexive about issues of culture, politics, and ideology, which work precisely because they are immersive, normative, and thus viewed as inevitable and natural.<sup>1</sup> Second, by drawing on my personal experience with the site over

the years, I am able to draw on a deep account of the varied affective impressions of the site on one user over time. At the same time, I draw on theories from UX and interaction design for my analysis, and my personal reflection is informed by my background in cultural rhetorics and cultural theory, as well as my industry experience in graphic design.

Finally, these methods are, of course, limited. First, the study is drawn from my own subjective personal experiences as a US-based user and is thus not meant to be taken as the universal experience of all users. As mentioned above, it is important to keep in mind that Facebook personalizes News Feeds and that one person's News Feed may look very different from another's. At the same time, my focus is on the UI itself. While I must at times discuss the nature of the content presented on the UI and describe specific examples of content, especially to talk about emotion and affect, my focus is on the structural features of the interface. It must also be noted that Facebook frequently updates its UI, and this study is thus based on a relatively small—though still meaningful—snapshot in time, as Facebook's UI in April 2013 is not the same as its UI in 2016 or 2018. For instance, criticisms resulting from the 2016 election have led to several changes to Facebook's operations, its UI, and the algorithms that determine content. Finally, this study is built from the assumption that writing and design are epistemic and that there is thus a fluid relationship between the interface and the embodied experiences of users.

### Facebook And Interaction Design: Browsing, Reacting, Commenting, Posting

Between April 18 and April 30, 2015, I experienced a seemingly unending supply of posts, articles, opinions and think pieces about the death of Freddie Gray and the subsequent protests in Baltimore regarding police brutality and systemic violence against African Americans through social media. As I moved between Facebook, Twitter, blogs, and news sites, I found that these posts, articles, and commentary helped me to not only learn about the events that had been taking place, but they also provided a way of processing and contextualizing the events in ways that are quite unique to social media. These applications enabled hyperlinked, networked information and ideas to come together in ways that disrupted, revised, and

<sup>1</sup> See, for example, Althusser's (2006) "Ideology and Ideological State Apparatuses," Gramsci (2006) on cultural hegemony, and Engels on "false consciousness," each of which, in different ways, take up how ideology works to create complicit subjects. This conception of ideology is also taken up in technical communication. See, for example, Palmeri (2006) on ideology of normalcy in usability discourse, Blyler (1995) on the ideologies that ground research practices within technical communication, and Herndl (1993) on ideology and its implications for professional writing research and pedagogy.

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appended to the narrative timeline constructed by popular media narratives, institutional histories, and other official accounts (See Figure 1).<sup>2</sup> I found myself reading about historical events and writings, weaving across space and time: Articles drew parallels to the April 1992 beating of Rodney King, demonstrating that systemic violence against African Americans has been a longstanding problem in the United States. Lines from a 1960s Langston Hughes poem, “How can you / Shake your fist at tyranny / Everywhere else / But here?” encouraged me to reflect on the habit of critiquing problems abroad while failing to see problems in one’s own backyard; images of

“White riots” over time enabled me to see double standards in the public discourse about White riots versus Black protest. Quotes from Dr. Martin Luther King, Jr. appeared alongside critiques of the de- and re-contextualization of King’s words, offering ways to think about appropriately and respectfully drawing on the words of Black figures from the past. These fluid snapshots moved alongside contemporary perspectives about ongoing events, and about what we needed to do to address issues of racism moving forward (See Figure 1). As the days progressed, I wondered: How does this cross-temporal engagement impact how users interact with information, especially politicized content?

Having been a Facebook user since 2006 and social media user since around 1997, I couldn’t help but notice that my affective experience of using social

2 Even though this study is of Facebook, it is important to note that the actual lived experience of using Facebook often involves toggling between social media, news sites, other websites, and messaging applications.

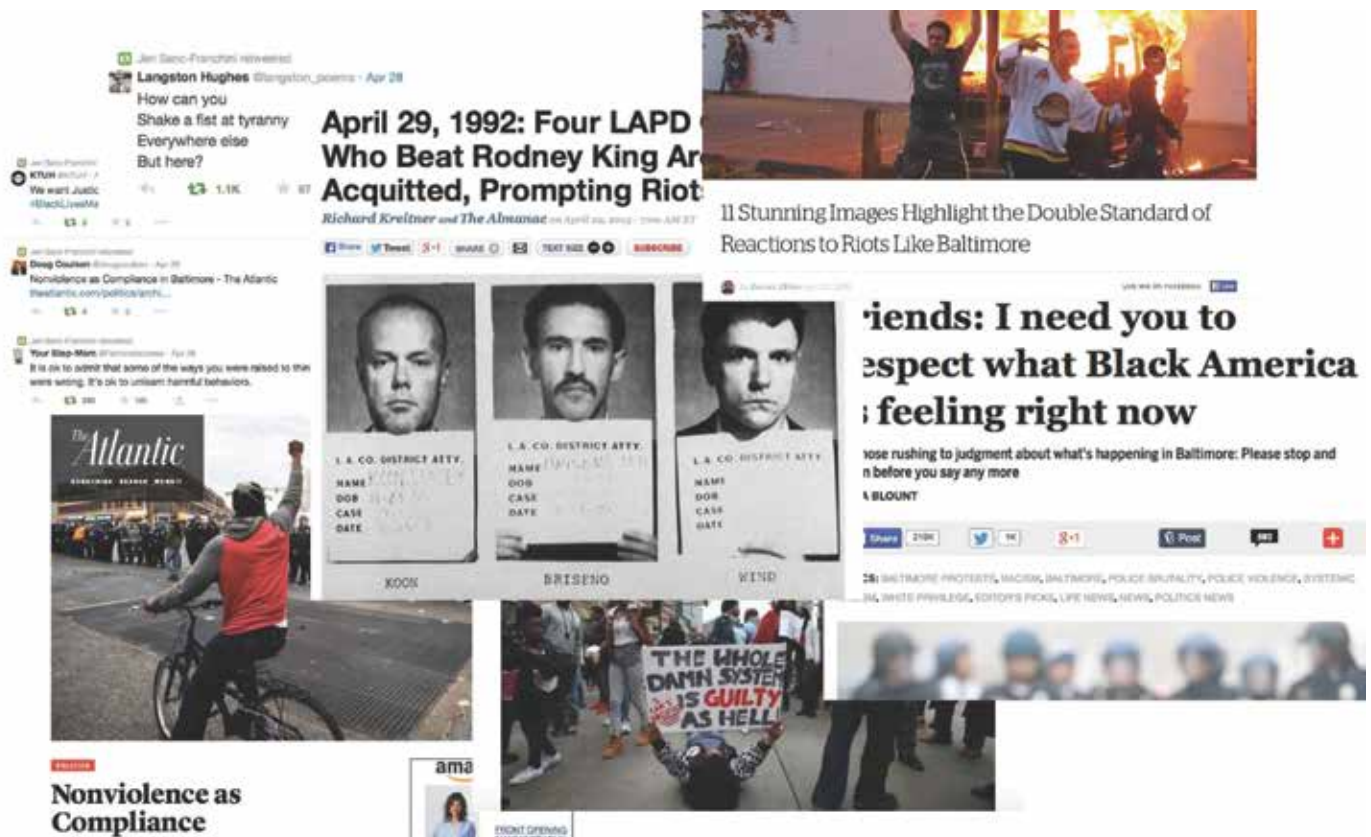


Figure 1. Visual representation of layered, hypertextual time across social media in the days between April 27 and April 30, 2015. (Clockwise, from bottom L: Tweets about “Nonviolence as Compliance” article from *The Atlantic*; tweets from @langstonpoems citing lines from Langston Hughes’ 1960s “Dixie Man to Uncle Sam”; “April 29, 1992: Four LAPD Officers Who Beat Rodney King Are Acquitted, Prompting Riots,” from *The Nation*; “11 Stunning Images Highlight the Double Standard of Reactions to Riots Like Baltimore,” from *Mic*; “Dear white friends: I need you to respect what Black America is feeling right now,” from *Salon*; photograph of person lying on the ground in protest of police violence, holding up a sign that says, “The whole damn system is guilty as hell! I can’t breathe.”)



media was going through some dramatic changes at this time. Perhaps this was partly a result of growing national conversations about systemic violence against Black people. The #BlackLivesMatter movement—which has protested police brutality against African Americans and systemic violence against Black people since 2013—was in full swing. Examples of systemic violence against African Americans were reported on repeatedly at this time: The murder of Trayvon Martin by George Zimmerman, who was acquitted in 2013; the 2013 murder of Michael Brown and the subsequent protests in Ferguson, Missouri; the 2014 murder of Eric Garner in New York City; and the 2014 murder of 12-year-old Tamir Rice by a Cleveland police officer, to name only a few examples. Around the same time was the April 25, 2018 earthquake in Nepal, which I would later learn killed nearly 9,000 people and injured nearly 22,000. Facebook took up this cause, collecting more than \$15 million in donations and deploying its safety check feature to help indicate whom among Facebook users in Nepal were “safe” in the midst of the national crisis. I couldn’t help but wonder about the consequences of Facebook bringing exposure to such events front and center in my everyday life, and I found myself consciously aware of how social media affected how I interpreted events, issues, the world, and myself while I was out and about offline as well. While I appreciated gaining a more informed perspective about the events taking place around me, I began to feel, in visceral ways, how time, as represented by social media interfaces, impacted how I felt—about the world around me and about others.

In the subsections below, I analyze four microinteractions as facilitated by Facebook’s UI: browsing, reacting, commenting, and posting. First, however, I provide a brief description of Facebook’s UI, through which each of the four microinteractions take place. The homepage is divided into three columns with a narrow navigational header up top (See Figure 2). The header, set in Facebook’s signature dark blue background, contrasts with the white and light gray background of the rest of the site. The largest part of the header is a search bar, from which users have the ability to leap to “people,” pages, and posts as desired. The middle column, the “News Feed,” is the centerpiece of the interface, and it is proportionally the widest column on the site. The News Feed asks

users to share “What’s on [their] mind?” and generally includes photos, videos, memes, articles, opinions, advertisements, and user commentary. Content can be reposted from other users’ “walls” as well as from external sites. This content is framed in white rectangles, and posts are visually separated from one another based on who within one’s network created the post. Each status update includes the name and avatar of the person who posted the status, how long ago the status was posted, the privacy setting of the post, and buttons that allow users to hide a status, unfollow the person who posted it, report the post, save the link, or turn on notifications. Aside from user avatars, much of this information is represented in alphabetic text. At times, there is an indication that the original post has been edited, and, on occasion, a digital or physical location is also indicated in alphabetic text. In other words, names of places are prioritized as opposed to some other way of characterizing a place, for instance, a place’s physical geography that might be represented by a map or photo, or the personal memories attached to a place might be represented by links to a user’s prior posts or images relating to that place. User identity is a key building block of Facebook and is thus visually significant. Identity is signified by an alphabetic first and last name alongside a single image. It is through this visual interface that users browse, react, comment, and post on Facebook.



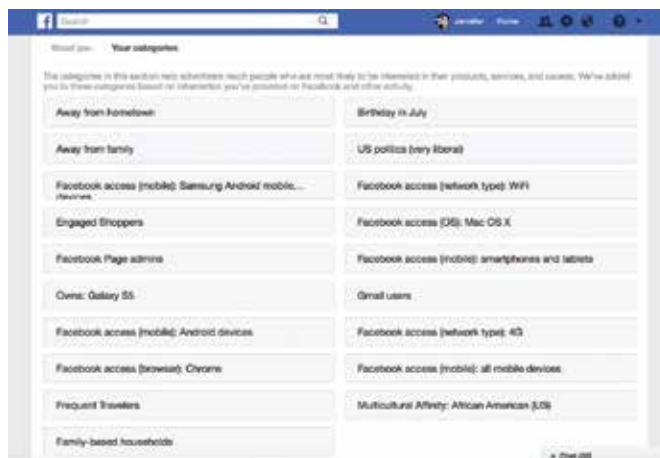
**Figure 2. A screen capture of my Facebook home page on April 30, 2015**

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### Browsing Politicized Content on Facebook

The most passive form of engagement among the four microinteractions listed above, browsing involves scrolling through the News Feed and browsing through posts by people within one's network, interspersed with targeted advertisements (See Figure 3). The News Feed is designed with an infinite scrolling technique, making it easy for site users to spend substantial amounts of their time browsing. As Loranger (2014) explains, "Long, endless pages are good for time-killing activities because users are in the mindset for serendipitous exploration and discovery," and infinite scrolling involves a "lower interaction cost" in comparison to having to navigate and click to a subsequent page. While the design of the News Feed might give the illusion of reverse chronology in terms of its name, its linear design, and the spacing of various elements (the coloring, fonts, and space between posts are uniform), it is generally not the case that posts are displayed in reverse chronological order, nor is the pacing of posts temporally uniform, nor is spacing indicative of temporal duration. For instance, my current timeline shows a status posted 12 minutes ago followed by another status posted four hours ago, followed by another status posted more recently, 23 minutes ago, followed by another posted an hour ago. As this example shows, the News Feed presents an anachronistic sense of time and order.

Browsing on Facebook often takes place alongside engagement with other social media platforms and websites that present a range of perspectives around political issues (See Figure 1). Historical events, memories, and writings across time are interwoven in a layered, hypertextual temporality where literature from the 1960s, events from a few decades ago, and a catalogue of images from across time can be experienced alongside one another. This cross-temporal engagement affects how users interact with information by enabling the potential for engagement with an issue from multiple temporal perspectives, allowing users to draw connections across time, space, and embodiments. Such cross-temporal experiences may not be unique to Facebook; it can be argued that we have similar encounters when browsing the Internet more generally. At the same time, Facebook brings such perspectives to the user through instant feedback, and with very little effort required from the user. Such engagements are also distinct from media engagement across older sources of news such as radio, the newspaper, or television, which



**Figure 3. My Facebook Ad Preferences: How I have been categorized by Facebook's algorithms**

audiences tend to experience relatively synchronously, based on the broadcasting and publication schedules of media corporations. When reflecting on this temporal re-arrangement in relation to users' experiences with politicized perspectives on their News Feeds, we can see how encounters with posts presenting oppositional views might feel jarring and out-of-context.

The content that appears on one's News Feed and the order in which it appears is not driven by quantitative time but by an opaque algorithm that takes into account factors like with whom people are Facebook "friends," their groups, their activities, their "Likes," their friends' activities and "Likes," the activity surrounding a post, and what and whom they have permitted to show up on their timelines, as curated using the "block" and "hide" features (See Figure 3). As a result, activity is also contingent on external factors including the time of day that a person has posted in relation to the time of day when people tend to use Facebook. That is, what users see on their News Feed is based in part on what Facebook's algorithms deem most relevant to them, along with something of a "popularity contest," whether in terms of the popularity of a post or the popularity of a user. Facebook's ad preferences show users how they are sorted, and what kinds of data determine what advertisements show up (See Figure 3). Some of this information is gleaned from user activity; for instance, Figure 3 shows that I have been categorized as being away from my hometown and family, "very liberal," an engaged shopper, and as a frequent traveler within a "family-based" household, even though I have

not directly identified with any of these categories within Facebook's UI. In addition, my "multicultural affinity" has been identified as African American (US). Through such markers, Facebook racializes content that is relevant to a much wider range of races, ethnicities, and cultures.

These features—algorithmic sorting and individualized curation—can often lead to the creation of a News Feed that serves as a virtual echo chamber that validates existing perspectives and interests rather than presenting a range of viewpoints that deeply engage and dialogue with one another (Bessi, 2016; Bessi et al., 2016; Seargeant & Tagg, 2018; Vitak, 2014). In addition, the design of the News Feed causes certain kinds of content to stand out to users as they scroll through: The headlines and titles of linked articles and opinion pieces (See Figure 2), as well as shorter posts by users, can be presented in larger font. Figure 2 shows that titles from external sources are generally much larger than any other text on the UI, including the commentary of the user who shared the link, when it was posted, or the source of the link. Through this contrast in size, the UI prioritizes external source headlines (regardless of the type of source) and thus the voices of media companies (and potential corporate investors and marketing partners) over the voices of individual users or the interactions across users. Source information is especially important for determining the credibility of information and thus for deterring fake news. Although the source is identifiable on the interface, it is de-emphasized in small, gray font below the title and the description, making it easy to overlook.

On Facebook, users browse through news and think piece headlines intermixed with friends', acquaintances', and family members' posts, perspectives, and personalized photos in what is oftentimes a cursory manner. Through this assembled amalgamation of content, the News Feed de-/re-contextualizes political content to where it can feel dis-/mis-placed. That is, people have tended to consume news and political information in contexts that were specifically designed for that purpose, through television programs and networks, the newspaper, news programs on the radio, town halls, and political flyers. Even when individuals engage in dialogue about political issues offline, such conversations are often located in the context of a specific relationship and generally amidst a more extended conversation or set of conversations and relationship building activities. In contrast, encountering

politically divisive perspectives on Facebook, which currently has a much wider scope to include every so-called "Friend's" thoughts, opinions, interests, and accomplishments can feel like something of a sudden, textual assault. Polemical content can feel especially contentious when one is not mentally prepared to engage with this type of information. As political content on Facebook has become more ubiquitous, users may indeed have come to expect such encounters on the site. At the same time, the expectation of a negative experience does not necessarily negate the affective impressions of that experience. As long as users continue to use Facebook for a range of purposes, we would do well to consider the affective experience and varied implications of sudden and decontextualized political discourse. To be clear, my point is not that there is no place for sudden and decontextualized political discourse. Rather, the issue is when this one rhetorical strategy is normalized and implicitly encouraged by the design of a ubiquitous platform like Facebook.

### The Politics of Reacting

A second, more active yet perhaps simpler and more limited, microinteraction afforded by Facebook is the ability to "react" to posts. The ability to "Like" posts was enabled in 2009, and reacting to posts on Facebook now involves a decision to select among six emotional reactions: Like, Love, Haha, Wow, Sad, and Angry, as represented by six animated emoji (See Figure 4). By moving from a singular "Like" button to six possible reactions among which one must choose, Facebook is able to obtain more granular data about how users respond to content. At the same time, the design of the reaction function epistemologically limits user conceptions of how one can—and should—react to information. Reacting typically takes place in the context of browsing, and it serves as a quick way to validate and/or reframe a user's post and perspective. Further, reactions are tallied quantitatively, and users are able to see how many other users have reacted—or not reacted—to the original post while quickly scrolling through the News Feed. This ability to accrue "Likes"



Figure 4. Facebook reactions

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and other reactions impacts how users make decisions to post content. In addition, Facebook instantaneously registers this information to further tailor users' News Feeds, using this data to organize users and thus present tailored political content. (See Figure 3) In this way, reacting further serves to limit the range of perspectives to which users are exposed, so that users are comfortable enough to return to the site, engage with material on the site, and spend time on it. In addition, this microinteraction works to sort users into indexable groups, thus enabling profit via data mining. In doing so, Facebook flattens user identities, communications, and interactions in order to make them quantifiable, processable, and, thus, profitable.

### Commenting and Political Engagement

The algorithms that dictate what appears in an individual's News Feed enables users to engage in conversations about topics and events across spatio-geographical and temporal boundaries, as users can interact with posts asynchronously. Such connections are made across users as well as across content, where posts about particular topics or with particular keywords are visually grouped and thus experienced together. Commenting is a third microinteraction that, like reacting, often occurs in the context of browsing, if not by using the search bar to jump to a specific user's profile or to a group. Commenting involves an even more active form of engagement than browsing or reacting, as users are able to provide a wider range of tailored content in response to a post. The ability to comment on Facebook has, in recent years, expanded to include visual comments, including emoji, images, gifs, and "stickers." Such features make it easy for users to quickly "comment" without requiring the effort or literacies that would have been needed to compose using alphabetic language. Expedient responses can contribute to political polarization and discord, as users are able to share immediate reactions without being required to take the time to reflect and think about how to best deliver those responses. As a result, Facebook enables brash, reckless, and emotionally heated interactions. At the same time, such discourse can indeed bring greater attention to the site, which is ultimately profitable for the company.

Comments are threaded and either presented in reverse-chronological order or are sorted by "Top Comments," particularly for highly circulated content. At the same time, one can engage in

conversation—through comments—with users outside of their network of Facebook "Friends." Through this capability, the commenting function can serve to de-/re-contextualize human engagement such that users who have no prior relationship are able to engage in dialogue, debate, and arguments about what can be deeply personal and polarizing political issues. In this way, Facebook forges new relational circuits that can serve to further contribute to political discord. That is, it is easy to dismiss and feel antagonistic toward a person with whom one has no prior relationship. In addition, commenting exists within a context where even though one might be unacquainted with another commenter, they may be well familiar with a mutual acquaintance, oftentimes the original poster. In these contexts of asymmetrical relationships, disagreements can be especially fraught. When disproportionate numbers of individuals are on one side versus another, it can feel to the person with less support as visible on the interface like they are under attack. In addition, the fact that Facebook's UI includes private and group messaging features that enables parallel backchanneling does not inspire trust in the idea of a fair and open dialogue. Such a context may not be the most conducive for involved discussion around political issues and may rather serve to inspire feelings of unfairness, defensiveness, or hostility instead.

There are several potential consequences of commenting in the context of Facebook. Comments themselves can be "Liked" and reacted to, and the number of these reactions are quantitatively represented beside the comment itself (Meshi et al., 2013). As a result, some users may be compelled to create comments designed to accrue likes and reactions as a means of social validation and digital exposure. In many cases, it appears that this has led to attempts to produce "snappy comebacks," snark, oneuppersonship, "hot takes," and what has been dubbed by some as "callout culture," or the "practice of publicly criticizing people for violating accepted behavioral standards" ("callout culture").<sup>3</sup> Moreover, expediency is privileged in this environment, and provocative content that can garner the strongest emotional response is prioritized over content that is, for example, the most informative,

<sup>3</sup> To be clear, this observation is not a critique of cultural critique, including the critique of racism, sexism, misogyny, heteronormativity, ableism, or classism, which is sometimes dismissively labeled as "callout culture." Thoughtful and measured critique is important and necessary for any democracy.



thoughtful, or intellectually engaging. At the same time, posts with numerous comments often do not show all of the comments on the post, unless the user takes the step to click and expand the “view comments” link. In this way, the interface highlights the original post, while minimizing the conversation surrounding the post that can serve to contextualize and provide greater nuance to the post. As a result, users who are browsing might not see comments that could potentially reframe how they interpret a post, because those comments are buried under an extra click. In addition, the criteria used to filter what content is visible is oftentimes based on users’ immediate reactions as opposed to factual accuracy or ethical consequences. Users can also be “Faceblocked” by other users for posting “political” content or for posting content that others find off-putting in some way, thus further enabling user filtration of political and other challenging content. Such features can be seen as strategies that further strengthen the echo chamber, that enable people to avoid considering critiques of their perspectives, and that can ultimately further ignorance while strengthening users’ conviction in their perspectives.<sup>4</sup>

### The Politics of Posting

Finally, the fourth microinteraction I discuss in this paper is that of posting to one’s “wall” or “timeline” and thus to their “Friends” News Feeds. One might assume that posting requires the highest level of engagement among the four microinteractions, as users are able to post and share lengthier reflections and insights as mediated through alphabetic text, but Facebook’s UI encourages quick posting just as with the commenting feature; the main distinction is that posts appear on one’s own “page,” as opposed to being threaded on someone else’s page. For example, Facebook’s “Memories” feature, which occasionally pops up at the top of News Feeds, presents users with sharable, pre-formatted posts and short videos that memorialize events and relationships that exist within Facebook’s database, thus validating and concretizing within users’ minds the memories that had been entered into that

database. Posting appears to reward brevity, as shorter posts by users can appear more prominently in larger, bolded font and formatted with a colorful background (See Figure 5).

A third aspect of posting that encourages expediency is how users are able to quickly “share” or repost the content of others, including external content. Such content is formatted to appear larger than an individual user’s own content, as well as official and formal with little to no effort on part of the user. Visually, then, this design feature inspires a sense of credibility, regardless of the actual accuracy of the information, as such posts are formatted in the same way regardless of whether the post comes from a mainstream news source, personal blog, or think piece by a political interest group. Furthermore, headlines that have already been strategically composed by others—oftentimes to generate attention via clicks—are pre-made for users to share (See Figures 2 and 6). Finally, users are easily able to “share” content based only on the headline that is presented, without being required to click the actual link and gain a fuller sense of the content that is being shared. Again, the ability to quickly enter data into the site’s UI is prioritized.

In the current 2018 update, Facebook users are able to post not only alphabetic textual content but are also presented with several options where they can “Ask for Recommendations,” “Answer a Question,” “Poll,” “Tag Event,” or “Support Nonprofit” (See Figure 7).



**Figure 5. Shorter post in large, bolded font and colorful background**

<sup>4</sup> Note that this analysis focuses on what Facebook’s UI prioritizes and encourages at its default settings. Thus, users who themselves value credibility of information or its impacts on society at large and who are technologically literate can purposefully negotiate the site in ways that best support their values. At the same time, it must be noted that many users do not have the technological literacies nor the educational privileges needed to modify their use beyond the site’s default settings.

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**Figure 6. Sharing external content on Facebook**

By presenting options to quickly post pre-formatted content based on a number of set purposes, Facebook again prioritizes expedience and emotional reactivity to get users to spend more time on the site. Furthermore, by presenting these options for engaging with the site, Facebook implicitly encourages particular ways of interacting with others. In general, these options appear to focus on enabling users to assess the opinions of others or to pronounce their own opinions as they respond to requests for recommendations and polls, answer questions, or as they opt to support a nonprofit. In other words, the focus is not on learning, sustained inquiry, dialectical exchange, or psychosocial support. Rather, Facebook encourages users to take a stance and to categorize others based on their stances, a priority that can, again, contribute to political polarization and discord.

At the same time, despite Facebook's "ethic of expediency" (Moses & Katz, 2006), two qualities make posting on Facebook affectively fraught: first is the sense of the permanence of the Internet, as expressed by the oft-repeated phrase, "the Internet is forever." Oftentimes used to warn Internet users of the dangers of posting content they may regret being publicly accessible in the future, the idea of the permanence of the Internet can inspire fear and anxiety over what one



**Figure 7. Facebook's dialog box for posting to the site**

posts. This anxiety is especially true given that, secondly, Facebook's user base has widened exponentially. That is, many users are connected through Facebook with a "Friend" base that includes friends, family members, relatives, colleagues, and people with whom they grew up. With such a varied audience, it becomes difficult to post content that appeals effectively and is understood appropriately by all groups. In addition, Facebook and other social media platforms encourage the expectation of instantaneous feedback. As with comments, posts can be validated in a number of ways, including through "reactions" and "comments." The fact that this data is displayed—depending on one's privacy settings—for all of one's connections to see again encourages the accrual of "Likes" and other reactions. And because the News Feed moves so quickly due to information saturation on the Internet, speed is a factor. In other words, one's post must generate an immediate response, lest it be pushed down the News Feed and forgotten. As with commenting, such conditions encourage users to try to come up with witty remarks and observations and punchy "one-liners." In these ways, the design decisions that enable posting on Facebook encourages concision

and response-driven content—qualities that tend not to be conducive to deep engagement or discussion, and that can even encourage increased polarization around political issues.

The qualities I describe above—the permanence of the Internet and Facebook’s wide user base—alongside Facebook’s ethic of expediency, alongside the tendency to encourage judgment and criticism (as opposed to critique) via “callout culture” and to expect instantaneous feedback, can create anxiety in users about posting any tentative thoughts or perspectives and can discourage the kinds of vulnerability required to engage in deep negotiation of political issues. Through this combination of features and conditions, Facebook’s UI creates a kind of affective dissonance where users are encouraged to post content easily and quickly, even while the risk of doing so may feel especially great. In a situation where it is anxiety inducing to share one’s genuine thoughts, questions, and confusions about political issues without fear of judgment or consequence, the conversation—as well as individual development with regards to political concerns and social thinking—stagnates, polarization across political views deepens, and the possibility of a more equitable democracy is compromised.

## Discussion

As my critical interface analysis shows, Facebook’s UI prioritizes concision, speed, curation practices that limit divergent perspectives or nuanced critique, and the flattening of complex identities and political commitments such that they are indexable and processable. Affectively, the site encourages sensationalism, controversy, drama, intrigue, as well as feelings of amusement, anxiety, fear, and suspicion over curiosity, empathy, understanding, or kindness, and it does so in part by rewarding content that garners a strong immediate emotional response, as quantified through users’ reactions. Another factor that contributes to this affective response is how Facebook encourages the sharing of opinion and judgment. It even asks, “What’s on your mind?” (See Figure 7). At the same time, the UI enables a siloed way of interacting with ideas through algorithmic filtration and its block and hide features that, I argue, impacts how users interact with the world around them. In this mediated reality, any question about—or challenge to—one’s political

views can feel like a threat that will potentially rock the stable worldview on which one’s values, judgment, and way of navigating the world rest.

Furthermore, Facebook achieves these outcomes largely through spatiotemporal means. First, by designing its site such that users will spend as much time on the site as possible—via infinite scrolling technique, sensationalistic and reactionary content, and ease of use—Facebook is able to present a tailored reality and to determine the shape of that reality. By making it as easy as possible for users to quickly register their reactions to content, Facebook speeds up conversations in superficial and cursory ways and, in doing so, is able to amass and to profit from user data. By decontextualizing conversations and relationships through an anachronistic mediated reality, Facebook creates pathways for new mediated interactions, without seeming to have considered the need to design the support necessary to encourage those interactions to develop and grow in fruitful and healthy ways. In sum, Facebook refigures spatiotemporal realities, which thus shape users’ experiences of information, politics, and world events; by reorganizing users’ temporal realities, Facebook shapes users’ understanding of their place in the world. As Sean Parker, former president of Facebook, put it, Facebook “changes your relationship with society, with each other.” In doing so, Facebook enables new forms of mediated intimacies, which has been described by Chambers (2013) as “new meanings of ‘friendship’ as features of a networked society” (p. 1), and as “a framework to explain the distinctive ways in which new media technologies are being engaged with to sustain personal connections and to understand the nature of these connections” (p. 17). Furthermore, Facebook’s UI enables new relational circuits, which work to mediate the dissemination of politicized content, thus enabling new political formations. In this way, I argue that it is not just the content posted to the site but also Facebook’s interface design—in shaping that content—that contributes to a deepened polarization around political issues. On Facebook, a site that encourages speed, concision, superficial engagement, and decontextualized relationships, it becomes difficult to maintain the kinds of intimacies and interpersonal engagements that are necessary for sustained critical and thoughtful political exchange.

The impetus for this research stems from my own experiences on Facebook and the growing concerns I’ve

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had about how the site mediates our perceptions of the world and the people around us. Specifically, there was more than one occasion between 2015 and my decision to take a break from Facebook after the 2016 U.S. presidential election when I distinctly noticed how my perceptions of reality seemed to be distorted based on all the time I was spending on social media. I was spending embarrassingly large amounts of my time on the platform, perhaps ironically as a way of coping with all of the negative news I was reading there. I cannot honestly remember if it was after the Orlando nightclub shooting, Hurricane Harvey, the Las Vegas shooting, or the shooting of Philando Castile or Alton Sterling. More likely, it was after reading some of the numerous responses that explained how to interpret and respond to those events. What I do distinctly remember is my reaction to tragic and sobering news moving from tears, mourning, and anger to exhaustion, avoidance, and ambivalence.

I remember feeling like everything was horrible and that there were so many “wrong” ways to be, and feeling perpetually anxious about doing or saying the “wrong thing,” to the point where I found it difficult to interact with others in the way that I used to. Perhaps what I experienced is what Stosny described as “headline stress disorder,” (Spector, 2017; Rodriguez-Cayro, 2018) or what Pattillo (2018) referred to as “disaster fatigue.” And, I must admit that there were times when I wrongly conflated people with their social media personae, and when I fell into thinking of people not as full human beings but as defined by their political opinions and perspectives—in some of the same ways that users are categorized on Facebook, even when I knew the limitations of those categorizations. I remember reading large amounts of content but retaining very little of it, because I was not giving myself time to reflect on—or recover from—what I was reading. Even as someone who understands the importance of critical digital literacies, I found myself using Facebook to wind down and, as a result, feeling firsthand the embodied experience of Facebook’s mediated affects.

UX designers must be attentive to how technology designs create new relational circuits, along with how those relationships work to mediate the dissemination of politicized content. As scholars like Attwood, Hakim, and Winch (2017) have argued and as this paper has shown, “While the sphere of the intimate excites considerable fascination and attention, it

continues to be seen as relatively unimportant within the wider scheme of political and public life . . . . Yet politics, economics and intimacy remain profoundly interconnected” (p. 249). This statement is proving all the more true with the 2016 U.S. presidential election of Donald Trump and with Russia’s continued effort to sow discord online; apparently, affecting how people relate and connect with one another has political consequences. Furthermore, as McNamee’s (2017) concerns about Facebook imply, the work of UX designers has important affective consequences that impact democracy and public health. In other words, UX practitioners design interactions that potentially uphold and/or undermine citizen voices, public deliberation, and equal access and opportunity. Thus, this study has several implications for UX practitioners—especially those who work with political content, raising such design-based questions as:

- How does a given UI mediate how people interact with one another over time? That is, how does pacing and duration as mediated by the UI impact those relationships? Does political engagement take place in the context of those relationships, and, if so, what does that engagement look like?
- What are the purposes and outcomes of connecting users with one another? Are we only connecting users for profit, or are there other outcomes that might benefit the users themselves? If the latter, what potential barriers exist that may keep one or more users from experiencing those benefits?
- How will this feature make people feel (understanding that it is not necessarily a good thing to feel good all the time)? What are the logics of the interface, and how will it encourage them to interpret and engage with the world around them?
- How and why might we create designs that encourage more active, critical, and deliberate participation among users?
- What kinds of content, values, and logics are rewarded over others? What are the affective, temporal, and political consequences of these priorities?
- What is the relationship and place of these mediated interactions within the larger media ecology?
- How can we keep in mind that when dealing with political issues, people need background information—whether about democracy, institutionalized racism, immigration, healthcare,



environmental issues, and/or women rights—to make informed decisions?

- Finally, what kind of society do we want to live in? And, how might we design technologies that bring us to that ideal?

Such questions, I argue, push forward existing approaches within UX and interaction design—approaches that examine technology use over time and in the context of larger media ecologies, that consider social good, and that account for users' emotional experience of a technology—and it does so by weaving together affect, time, and politics.

In addition, this work has methodological implications for technical communication researchers and scholars, highlighting the need to incorporate humanistic, interpretive research methods including textual analysis via a critical user interface analysis of microinteractions, theory-driven critique, and personal reflection, to more strongly understand the cultural and ideological dimensions of UX. While it is of course important to understand the technical aspects of technical communications as well as user's perspectives about technologies, it is also imperative that we consider how technologies affect users through processes of interpretation and embodied engagement. Although technology researchers have done important work examining the role of the algorithm as it pertains to the political and affective consequences of social media, (Noble, 2018), I have shown how these divisions are also interpretive, interface driven, and designed, contingent on micro-level interactions with digital interfaces and the cultural and epistemological assumptions embedded within them. Furthermore, my method of analyzing the four microinteractions of browsing, reacting, commenting, and posting can potentially be applied to other social media sites. For example, Twitter and Instagram also incorporate the same four microinteractions, though they do so in distinct ways. A comparative approach may yield important insights for UX designers who want to understand how various design choices impact political engagement across social media. Future research that extends on this study to interview users based on their affective experiences with social media or to categorize and quantify posts based on affective resonances across various social media platforms may also help us to

understand with greater precision the implications of UX on affect and political engagement.

In "The Science of Fake News," Lazer et al. (2018) called "to promote interdisciplinary research to reduce the spread of fake news and to address the underlying pathologies it has revealed" (p. 4). They ask, "How can we create a news ecosystem and cultures that values and promotes truth?" This paper suggests that technical communication is one discipline that can and should contribute to this effort. To do so, we must we continue to critically interrogate how UX design can prioritize truth and integrity over expediency, usability, and profit. In addition, UX designers must understand that user politics are shaped by digitally networked and mediated intimacies. Only by taking ownership of this responsibility can the field of UX contribute to a more democratic, culturally reflexive technological future. In closing, I echo Roose's (2018) question posed on *The New York Times*, "Why is educating citizens about digital literacy the solution to misinformation ... rather than fixing the tech platforms that make misinformation hard to distinguish from the truth?" (para. 14). This analysis is just one more step toward a fuller consideration of how reflexive technology designers have an important role that can lead us toward more ethical, balanced interface design for disseminating political content and encouraging nuanced political engagement. Perhaps such designs would require slowing down and reimagining the way online economies work. Regardless, UX designers and scholars must be vigilant in considering how technologically mediated social interactions materially re-shape how users connect and relate with one another both online and offline, as well as across political and ideological commitments. Here's to future work that engages in deliberate examination of user experience through a humanistic and culturally reflexive lens that looks at how everyday online interactions can affect one's political sensibilities, one's level of reflexivity, and one's way of engaging with others.

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# Bitcoin, Blockchain, and Ballots: Technical Communication and Trust in Electoral Systems

By Jim Nugent

## Abstract

**Purpose:** In light of widening, popular distrust of electoral systems, the question of how to improve confidence in voting has become especially timely and important. Complicating the issue are emerging technologies that threaten to “blackbox” and obscure the function of voting systems. In addition to discussing the longstanding issue of trust in voting technology, this article provides a review of useful macro-scale concepts for practitioners to consider when working on projects related to electoral systems.

**Method:** After providing a synthesis and overview of the broad principles of electoral integrity, I overview blockchain (the technology underlying Bitcoin), discuss its possible application to voting systems, and consider its implications for the broader goal of fostering voter trust and legitimacy.

**Results:** Technologies such as blockchain have the potential to not only change the mechanics of voting but to change the very definitions of “transparent” and “trustworthy” as applied to election systems.

**Conclusion:** Trust in elections systems is ultimately a rhetorical, rather than technical, effect. As technical communicators are increasingly called upon to “unblackbox” election technologies, they must remain attentive to the potentially shifting values that define trustworthiness for the electorate at certain historical moments.

**Keywords:** voting, elections, blockchain, transparency, rhetoric

## Practitioner's Takeaways:

- Trust is the “gold standard” and primary objective for election administration, and researchers have identified a number of principles for maintaining trust in the integrity of electoral systems. These principles are helpful for technical communicators and UX designers to consider when working on projects related to electoral systems.
- Blockchain—the technology underlying the global cryptocurrency Bitcoin—has the potential to transform many kinds of information systems, including those used for voting. Blockchain brings its own set of advantages and disadvantages to elections, but it may also require entirely new ways of thinking about what it means for voting systems to be transparent and trustworthy.
- Trust in electoral systems is not a technical feature of a particular voting technology but rather a rhetorical effect. As such, technical communicators and UX designers are in an ideal position to help in the important civic work of educating the public about voting systems and establishing trust in elections.

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### Introduction

In July 1856, *Frank Leslie's Illustrated Newspaper* published a detailed account—complete with engraved illustrations—of an unusual ballot box that was discovered in use during a San Francisco election. Described as “the stuffer’s ballot-box,” the device included two secret compartments which could be filled with pre-marked ballots (Saltman, 2006). By manipulating panels on the side and bottom of the box, the vote tally could be changed by corrupt election officials while still keeping the box’s wax seals, as well as the apparent integrity of the vote, intact (“Stuffer’s,” 1856). News of this fraud led many people around the country to question how such “a device of concealment and chicanery” (Foutch, 2016, para. 4) could come to threaten the purity of the electoral process.

As recounted by historian Ellery Foutch (2016), just a few days after the story ran, an enterprising man named Samuel C. Jolie demonstrated a novel device at the New York Mayor’s Office: a ballot box made of glass. Inside an ornate, cast-iron framework, Jolie’s ballot box held a blown-glass sphere designed to keep cast ballots in full view of everyone present. Jolie’s invention was well received and quickly adopted in several jurisdictions. As Fauch noted, The New York Board of Councilmen lauded the invention:

The very transparency of the glass globe and visibility of the operations within would, they asserted, provide “perfect security and inviolability.” . . . In contrast with the dark murkiness of the wooden ballot box whose potentially hidden crevasses might contain contaminating and “false” votes, Jollie’s contraption provided literal transparency, keeping the ballots at all times “in sight” of voters and electors, as the committee repeatedly emphasized, suggesting a holdover from Enlightenment-era values that conflated visibility and virtue, what Michael Gaudio and Jay Fliegelman have referred to as the “politics of visibility” and self-evidence. (“A Clear Alternative,” para. 9–12)

As Foutch observed, “the rhetorics of visibility and transparency” (para. 1) were designed right into the new ballot boxes, and their “arresting architectural form . . . along with their inherent promises of transparency and

neutrality, made them icons in representations of fair and orderly elections” (para. 4).

Of course, to most voters, the effect of the boxes was only rhetorical. An unfortunate side effect of any secret ballot system is that there is no way to assure that a cast ballot is counted in the final tally. Inevitably in the voting process there comes a point where “all the voter can do is trust” (Alvarez & Hall, 2008, p. 36) that their vote is actually counted. Jolie’s glass box was itself simple and immediately appreciable in function to anyone in view. But what happened to the box—let alone the ballots cast within it—was unknowable to most voters after they left the polling place. The process of tallying was still readily manipulated, and the new glass box’s promises of transparency and integrity proved illusory; at best, the new ballot box could only persuade the voter that a certain type of election tampering did not take place in their immediate presence (Foutch, 2016). Still, in its rhetorical effect on voters, the transparent ballot box was undoubtedly important in cultivating some measure of public trust in the electoral process.

Trust is, of course, essential to democratic governance. Celeste, Thornburgh, and Lin (2006) have noted that “democracies derive their legitimacy from elections that the people collectively can trust” (p. 29) and fostering trust in election processes should be the overarching goal—the “gold standard” (p. 132)—in election administration. Given the current widespread concern in the US over the integrity of its electoral systems (Stewart, 2017), the question of how to foster trust in elections is particularly timely and important. Recent years have brought numerous proposals for new systems for voting, ranging from touchscreen, direct-reading electronic voting booths (DREs) to technologies as exotic as distributed blockchain, the technology underlying the global cryptocurrency Bitcoin. New voting technologies bring with them entirely new possibilities, benefits, and drawbacks to the electoral system. But to the degree that they are not understood by the electorate, such technologies may render the mechanisms of voting increasingly opaque and untrustworthy. Much like “the dark murkiness of the wooden ballot box” (Foutch, 2016, para. 5), emerging voting technologies threaten to move elections to an “unobservable digital realm” (Carter, 2017, para. 3). The workings of digital election systems are not likely to be as clear to modern voters as Jolie’s ballot box was to 19th century voters.

In describing her work with a voter outreach project in the pages of this journal, Pryor (2017) noted that “it is crucial that technical writers and UX professionals collaborate with election administrators to ensure we are designing a culturally inclusive democracy” (p. 163). From creating effective registration recruitment materials to coordinating UX design for balloting interfaces, there are many roles available for technical communicators to “design democracy” and to work toward the gold standard goal of trustworthy elections. In fact, technical communicators’ broad expertise in communication, usability, accessibility, and technology seems ideally suited to this important civic calling. In this article, I present an overview of some of the principles of election integrity and discuss the implications of emerging digital technologies for building trustworthy election systems. Specifically, I provide an explanation of blockchain—the technology that enables the online cryptocurrency Bitcoin—and I examine its potential as a voting technology. Blockchain’s success as a distributed information system has many researchers considering it for applications to other domains, including elections. Although its use in large-scale civic elections is speculative at this time, I believe that it is worthwhile to understand not only the possibilities and challenges that technologies like blockchain might bring to election systems but what insights they may provide into transparency and trust as operative principles in elections more generally.

### Principles and Possibilities for Trustworthy Election Systems

This is an undeniably tenuous period in the history of U.S. electoral systems. If you are a contemporary reader, you are likely to have witnessed—not once but twice—something that has occurred only five times in all of U.S. history: Electoral College victories secured without the popular vote. (No one now living has witnessed a previous instance.) In all likelihood, you can recall the phrases “butterfly ballot” and “pregnant chad” from the contentious 2000 Florida recount. You are also likely to be aware of ongoing investigations into Russian interference in the 2016 Presidential election. During that race, Donald Trump fomented mistrust of the electoral process by claiming that the final vote would be “rigged” (Trump, 2016). Even after his election, Trump falsely asserted that millions of illegal immigrants had

voted for his opponent Hillary Clinton and denied him the lead in the popular vote (Kessler, 2016).

Stewart (2017) identified at least three major areas of concern for the health of U.S. election systems—concerns that first emerged in 2000 and that became particularly acute in 2016:

The first focuses on election administration. Races can be close, and election outcomes can rest on the performance of voting technology and other matters that have to do with how elections are managed. The second centers on the worry that the U.S. system of verifying voter identity at the polls leaves elections open to being overrun by ineligible voters (noncitizens, felons), double voters, and impersonators. The third concern is a fear that growing reliance on computers to manage everything from voter registration through the final reporting of results makes elections vulnerable to computer errors and, still worse, the malice of hackers. (p. 51)

Especially troubling for U.S. governance is the partisan nature of these concerns and how they strike so deeply at the electorate’s trust in the infrastructure of voting itself.

Of course, in the broadest sense, distilling the collective will of an entire electorate into a single, unambiguous vote tally is a huge and enduring challenge, and the question of how to hold fair and accurate elections remains a subject of ongoing research in political science, computer science, cryptography, philosophy, and other disciplines. In considering this question, scholars have, at various times, advanced principles that an ideal voting system should adhere to. By way of summary and synthesis, here are some of them (see Lowry & Vora, 2009; Celeste, Thornburgh, & Lin, 2006; Mateu et al., 2014; Jones & Simon, 2012; Paul & Tannenbaum, 2009; Gilbert et al., 2010; Frith, 2007; Conrad et al., 2009; Bringula & De Leon, 2014; dos Santos, 2011):

- **One person, one vote.** Only eligible voters may participate in elections and they may only cast one ballot each.
- **Ballot secrecy.** To prevent intimidation, coercion, or retaliation that could corrupt a voter’s true intent, voters have a right to privacy in their ballot selections.

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- **A voter may not sell or trade their vote.** One way to assure this is through the feature of “receipt-freeness,” where no identifiable connection between a ballot and a balloter is ever recorded, and no connection between ballot and balloter can possibly be made. If it is impossible to prove to a vote buyer or coercer how one voted (or even if one voted), it is impossible to satisfy their illegitimate demands.
- **Verifiability.** Voting systems should be “end-to-end” verifiable, from casting to counting. That is, voting systems should allow voters to know that their ballots have been recorded, interpreted, and tallied correctly. In addition, the public at large should be able to verify that all votes have been received and tallied correctly.
- **Usability.** At the voter interface, the ballot system should be readily appreciable in its operation and not require specialized knowledge to use. The balloting system should also be tolerant of human errors, both in balloting and in the deployment and administration of the system itself.
- **Accessibility.** Voting systems should be adaptable to voters of all abilities. For instance, blind or physically disabled voters should be able to use the system directly and not have to sacrifice their ballot secrecy or ballot verifiability by relying on a third party to complete their ballots. Voting systems should also be able to serve speakers of many different languages.
- **Availability.** The process of voting should be easy enough that all who want to participate can do so. Voting should not require inordinate amounts of the voter’s time, hassle, or resources.
- **Fair play.** The rules for the election should be applied fairly and uniformly across the system. Bias effects (such as those caused by the ordering of candidates’ names on a ballot) should be eliminated.
- **Integrity.** No part of the system may be corrupted by malicious agents. For instance, the system should not be hackable by individuals from the outside nor permit its results to be altered by dishonest officials from the inside. The system must also be immune to non-malicious threats, such as service interruptions and faulty equipment or software.
- **Comprehensibility.** As a prerequisite to trusting the balloting system, voters should be able to comprehend how it works. This is, of course, impossible if hardware and software systems are

proprietary closed source, or otherwise held off-limits to the public. Comprehensible systems must also be transparent systems.

Of course, several of these principles stand in direct contradiction to one another, a fact that immediately illustrates the utopian nature of an ideal voting system. For example, the principle of end-to-end verifiability is incompatible with the principles of ballot secrecy and “receipt-freeness.” If it were possible for someone to retrieve a complete record of his or her ballot after an election for the purpose of auditing the system, for instance, it would also be possible for a coercer or vote buyer to demand to see it. Alternatively, voters in an end-to-end verifiable system could easily undermine the principle of fair play by falsely claiming that their vote was corrupted, perhaps in order to erode public trust in the legitimacy of the winning candidate or to change the results of a tight race. A voting system that is consistent with all of the principles above is, unfortunately, not possible and compromises and trade-offs are inevitable.

However, new digital technologies now make it possible to do things that paper ballots and ballot boxes (even glass ones) cannot, leading some to reconsider the balance of trade-offs that exists in current voting systems. Despite some apparent drawbacks, for instance, electronic voting holds great potential to make voting accessible and available at the point of the user interface in ways that physical balloting is unable to (Celeste, Thornburgh, & Lin, 2006). But beyond the interface, digital technologies may also allow us to shift the balance of trade-offs in more profound and unprecedented ways. For instance, blockchain—the information technology that enables Bitcoin—has come to the attention of some researchers as a potential system for elections (Piazza, 2017; Noizat, 2015; Swan, 2015). Although originally developed as a system for moving money around online without having to rely on a bank or other intermediary, Bitcoin also just happens to operate in several ways like an ideal voting system.

As I will describe more fully in the sections ahead, one of the key innovations of the Bitcoin network is that it prohibits anyone from spending the same bitcoin twice, just as an ideal voting system does not allow someone to vote twice. Just as an ideal election system keeps ineligible voters from participating, the Bitcoin network does not allow someone to spend a bitcoin



that they do not legitimately own. As an information system, Bitcoin has apparent integrity and resistance to fraud. Despite having no central banker or clearinghouse to coordinate its operations, the Bitcoin network is, as of this writing, serving as a trusted exchange for over US\$143 billion in capital (“Bitcoin Core,” 2018). The network has so far demonstrated resilience to hackers, and its lack of centralized control makes manipulation by corrupt officials very difficult. Bitcoin transactions are public, immutably recorded, and verifiable, but, at the same time, they are also pseudonymous. Bitcoin also meets at least one criterion for transparency in that the software it runs on is entirely open source and its code is available for review by the public. This intriguing combination of features has led some researchers to consider how Bitcoin—or, more precisely, the technology underlying it known as blockchain—might be used to improve balloting systems.

To be sure, as I write this, there appears to be an ongoing mania and irrational exuberance for Bitcoin. The market valuation for bitcoins has recently swelled, and so too has a backlash of popular wariness and distrust of the cryptocurrency. While Bitcoin has made many people wealthy, it has also been dismissed as a Ponzi scheme and criticized as “a bubble wrapped in technomysticism inside a cocoon of libertarian ideology” (Krugman, 2018, para. 2). And although the blockchain infrastructure of Bitcoin has not yet been fundamentally compromised, hacking and social engineering have been used to defraud the holders of bitcoins (Lee, 2017). Still, although there is a much to remain skeptical about with regard to Bitcoin and its promoters, blockchain stands as an innovative combination of technologies (Narayanan & Clark, 2017) that has many serious scholars turning to it for lessons applicable to other domains of information technology. But before I look at Bitcoin and blockchain’s particular application to voting, I would like to first provide a more detailed introduction to the technologies themselves.

### From Cryptocurrency to the Ballot Box

Bitcoin and blockchain were developed by someone, or some collective, publishing under the name Satoshi Nakamoto (2009). The protocol was devised to solve the problem of how to transfer money to other people on the Internet in a way that behaves like cash (Swan, 2015). Most of us perform online monetary transactions on a daily basis, but few of us give much

thought to how mediated those exchanges can be. For instance, if you were to buy something online, you might turn to an intermediary such as PayPal to deliver your money to the correct party. To make that transfer, PayPal might debit your bank, credit your PayPal account, and transfer that amount to the seller’s PayPal account. This works fine for most purposes, but what happens if PayPal suddenly goes out of business, has technical difficulties, or decides to charge exorbitant fees? Or what if you wanted to send money to people or places of the world that are underserved by banks? In these cases, it would be nice to have something that behaved like cash but worked entirely online.

The challenge of implementing an online currency is that no physical object such as a coin or banknote changes hands. A fundamental property of physical coins and banknotes—one that we are all sadly familiar with—is that you can only spend them once. Since physical tokens cannot be moved around the Internet, an online currency has to consist of information. Of course, the idea of money existing only as information may seem unnerving, but most of us are actually already used to this in practice. For instance, if I write a check to you, and we both bank at the same institution, no physical money moves at all between us; the bank merely changes the information on their ledgers to show that my account is debited and yours is credited. The money in your account is no less real to you because it’s merely information; the important part is that you have faith that this information can be transferred to others and still count as money, or it can be converted into real banknotes if you ever need to. You also have faith in the bank to record the transaction accurately in their ledgers (and you have legal remedies available to you if it does not).

But if I wanted to send some money to you using an online currency, what would stop me from sending my money—that is, my information—to both you and another person at the same time? Unlike physical cash, sending online currency to two people at once could potentially be as easy as, say, sending an email to two people at once. This is known as the “double-spending” problem in online currencies, and, before the development of Bitcoin, the only workable solution to the problem was to have third parties and central organizations keep ledgers and clear every transaction (Denning & Lewis, 2017). The big innovation of the Bitcoin network is a feature called the blockchain,

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which acts as a massive public record of every bitcoin that has ever changed hands, along with a pseudonymous record of who exchanged them. Every time a bitcoin is spent, the transaction is recorded in this ledger and the ledger is distributed to everyone else in the Bitcoin network all around the world. Because the entire living history of exchanges is constantly available to everyone, it is always clear who holds the title to which bitcoin. Because the ledger is so widely distributed—and because it incorporates some clever cryptographic techniques—cheating the system is very difficult. Blockchain effectively solves the double-spending problem and makes it possible to have a reliable online currency without a central authority.

The end result is a system that works much like cash online. Just like cash, Bitcoin can store and transfer value directly between parties without an intermediary. But, unlike cash, nothing physical has to change hands. In some ways, the online currency improves on cash (for instance, counterfeiting cash is easier than counterfeiting bitcoins). In other ways, the protocol is worse than cash (without government fiat, no one is legally required to accept it as payment and no entity is in control of its monetary policy). Although Bitcoin will probably never deliver as much as its most utopian supporters believe it will (e.g., Swan, 2015), it is still noteworthy for its ability to function as a non-centralized, trusted medium of monetary exchange. As Narayanan & Clark (2017) have noted, although the concepts and techniques it relies on originated decades ago in academe, Bitcoin is remarkable not so much for the hype surrounding it but for combining serious ideas from disparate corners of scholarship into a system that is workable in the real world.

As mentioned, the relative success of Bitcoin has many researchers curious about what the blockchain idea itself might contribute to other realms. For instance, blockchain's ability to publicly record who owns which bitcoin could just as easily be used to record who owns which condominium. That is, blockchain could be used to perform functions that are ordinarily taken care of by governments, such as recording deeds for real property, liens, patents and copyrights, and other forms of public recordkeeping. In 2014, a U.S. couple became the first to have their marriage recorded in the Bitcoin blockchain (Smith, 2014). By writing a short vow in what is essentially the "memo line" of a Bitcoin transaction, their

proclamation of love became an unalterable part of the Bitcoin public ledger. (They intentionally destroyed 0.1 bitcoins in performing the gesture, worth about US\$32 at the time but over US\$2,000 in December 2017.) Although this act was merely symbolic, the permanent and public nature of the blockchain suggests how it might function as a civil registry. As Swan (2015) has suggested, "blockchain governance" could take advantage of "the blockchain as a universal, permanent, continuous, consensus-driven, publicly auditable, redundant, record-keeping repository" (p. 44), and, by doing so, nothing less than "a more truly representative democracy might be obtained" (p. 45).

Others have observed that blockchain might be used to store patients' medical records, to facilitate the execution of contracts, to timestamp copyrightable works, to provide online data storage, to facilitate logistics and supply chain management, and more (Hoy, 2017; Tsilidou & Foroglou, 2015; Swan, 2015; Manski, 2017). Some have suggested that blockchain can singlehandedly save the recording industry (O'Dair & Beaven, 2017). Others have conjectured that it could prevent slavery in the seafood industry and enforce fair labor standards by tracking global trade in fish from the ocean to the dinner plate (Capri, 2018). Several commentators see particular promise in blockchain for serving the needs of developing nations (Schmidt, 2017; see also Barabas & Zuckerman, 2016). For instance, electronic banking services could be provided over cellular phone networks in otherwise "underbanked" regions of the globe or in places where high service fees make banking difficult. Ultimately, time will tell which of these possibilities for blockchain will become real and which will prove to be hopeless optimism. Time will also certainly reveal unanticipated applications, new evolutions, and outright failures of the blockchain concept. But between the irrational exuberance for Bitcoin and the serious scholarly attention paid to blockchain lies fertile ground for thinking about issues of technology and trust.

### "Trust Us"

In addition to other social and civic functions, blockchain holds intriguing possibilities as a voting technology. It is not difficult to dream up how a Bitcoin-like system could be used for voting: If one bitcoin was issued to each eligible voter to use as a

ballot token in an election, each person could then “spend” that token on the candidate of his or her choosing. The bitcoins would transfer into each candidate’s account in a secure, reliable, and publicly verifiable way—with no cheating or double-spending permitted—and the candidate with the most bitcoins at the end of the voting period would be declared the winner. The final tally would be public and voters could see for themselves that their tokens were counted correctly in the blockchain. Because the blockchain would be widely distributed across many different computers, it would be very tricky for a central authority or outside agent to corrupt the election. This last feature makes blockchain voting promising for use in oppressive regimes or in the developing world (Meylan & Runde, 2018).

Although it’s not hard to dream up how blockchain voting might work, it’s also not hard to appreciate its many attendant problems. Ensuring the identity of eligible voters remains a sizeable challenge for electronic voting systems of any kind, for instance, and a blockchain balloting system would need to find an agreeable solution to the conflict between the principles of “receipt-freeness” and maintaining the verifiability of votes and tallies. Bitcoin transactions are not entirely anonymous (they are simply pseudonymous), so, in the voting system sketched above, it would be possible for someone to reveal their vote to a vote buyer or coercer. Proposals do exist, however, for refined blockchain voting systems that could ensure privacy and maintain the secrecy of the ballot (e.g., McCorry et al., 2017).

For many critics, however, a larger issue is that electronic voting of any form is unsettling—and perhaps doubly so when connected to the suspicious entity known as Bitcoin. A number of researchers and commentators object to leaving behind the physical verities of ballots and ballot boxes and suggest that voting systems must have a voter-verified physical “paper trail” to ensure that they don’t become black boxes (Alvarez & Hall, 2008). The concern for readily observable voting technologies is hardly a recent phenomenon; in an 1897 Rhode Island supreme court decision finding that mechanical voting machines were acceptable for use in state elections, Justice Horatio Rogers offered the following dissent:

It seems to me that, for a person to vote by ballot or paper vote, he must have some sensible

evidence—some knowledge by means of his senses—that he has performed some effectual act by means of paper to indicate for whom he has voted. After he has pushed the buttons, he cannot affirm, much less swear, that he has made any mark, perforation, or other distinguishing character on, or by means of, paper, to indicate the persons voted for. Nor can any one else give him that assurance by any sensible knowledge. (Barnefield, 1898, p. 734)

Echoing Rogers over a century later, Harris et al. (2004) demonstrated a similar concern for “sensible knowledge” by defining black box voting as “any voting system in which the mechanism for recording and/or tabulating the vote is hidden from the voter, and/or the mechanism lacks a tangible record of the vote cast” (iv). For many observers, the tangible, physical attributes of election records are essential for trust in voting systems.

But just as Bitcoin has persuaded some individuals to forego the physical verities of tangible cash, it’s worth considering how systems like blockchain might improve on the physical processes of voting as we know them. The trade-offs inherent in current voting systems warrant reconsideration in light of new technologies, particularly as these technologies could bring us new solutions to longstanding problems with the administration of elections. For instance, there is much room for improvement of U.S. voting systems in terms of accessibility (serving voters of all abilities and languages) and availability (minimizing the amount of time, hassle, and resources required to vote). New digital technologies could allow for a wider range of interface accommodations for physical, intellectual, and other disabilities. Similarly, remote electronic voting could make it possible for voters to securely cast their ballots using relatively accessible technologies such as smartphones. Eliminating barriers to voting, such as the time and transportation resources needed to vote in person, would allow more people to exercise their right to vote.

Beyond the advantages available at the immediate voter interface, however, newer possibilities such as end-to-end verifiable voting systems may suggest broader ways to bring trust and integrity to elections. For instance, rather than knowing *how* their ballot is cast, members of the voting public might find it easier to trust a system that let them know *that* their ballot was cast. That is, many of the technologies of voting (such as optical scan paper ballots, glass ballot boxes,

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and tangible paper trails) have an intentional rhetorical effect on voters: Because they aim to appear simple, honest, and unambiguous in function, the persuasive effect on voters is that the election system itself is simple, honest, and unambiguous (what Foutch referred to as the “rhetorics of visibility”). For instance, nothing about the optical scan ballot encourages a voter to consider that their checkmarks may not be interpreted correctly by the scanner, that the votes cast may not be tallied correctly, that the ballot may be thrown out due to a court ruling that stops a recount process, that a corrupt official may alter or destroy their ballots, and so on. By contrast, an electronic, end-to-end verifiable voting system is unlikely to be as simple or transparent in its function: Unlike a glass ballot box or a pencil mark on an optical scan ballot, how the blockchain or cryptography works is beyond the ken of most users. But, by making it possible for voters to audit their ballots and ensure that their intent was recorded correctly and applied to the final tally—and by enabling the public collectively to audit every ballot—such systems might lead voters to trust *that* the system works even if they don’t necessarily know *how*.

This may sound like a dangerous invitation to move elections into a deep black box. However, it is important to remember that current voting systems already contain many black boxes and unfortunate trade-offs. As Paul and Tanenbaum (2009) noted, when asked why we should believe that a voting system is honest, the only available answer is usually “trust us” (p. 29). In practice, voters can only have faith in the “chain of custody procedures used to protect ballots from the point the ballot is printed or programmed through the process of tabulating, reporting, and auditing the election” (Alvarez & Hall, 2008, p. 181). A system that allows users to verify that it works correctly, even if other aspects of the system remain opaque, could prove more trustworthy than a system that makes a few rhetorical gestures toward transparency, but otherwise relies on the voter’s pure faith. Particularly as newer generations of citizens may be increasingly socialized to trust distributed networks over central authorities, what today remain only speculative possibilities for digital technology could eventually become the norm for trustworthy systems.

### Conclusion

Since electoral systems are tied so closely to matters of trust and perceptions of government legitimacy, it is

never possible to just talk about voting technologies in isolation. As Paul and Tanenbaum (2009) have noted, voting technologies need to be considered as part of the broader systems they are enmeshed in:

Electronic voting has real advantages over paper ballots as long as the focus is on a voting *system*, not a voting *machine*. Rather than concentrating solely on more advanced cryptographic algorithms, designers should be viewing the problem from a system perspective, considering all the pieces and striving for defense in depth. (p. 23)

For blockchain or any other advanced digital technology to be implemented in an electoral system would require not only some very nontrivial undertakings in usability, design, engineering, testing, and documentation but a large-scale renegotiation of the social contracts for voting. It would also be necessary to consider how a technology as novel and seemingly opaque as blockchain could fit into established systems of trust.

An important consideration—and one that is easy to lose sight of when discussing the finer points of various balloting schemes—is that the “gold standard” of trust in elections is not actually a technical feature of a particular technological system but is rather, ultimately, a rhetorical effect. Trust has to be built rhetorically using strategies appropriate to particular audiences at particular times. For instance, to 19th-century voters alarmed at the prospect of sham ballot boxes, Jolie’s glass box sent a timely, appropriate, and persuasive message that their votes would be secure. By the early 20th century, however, concerns about voter intimidation came to eclipse concerns over ballot fraud in the popular imagination. Ballot secrecy eventually became a more desirable value within the electoral system than transparency, and Jolie’s glass ballot box largely disappeared from use (Foutch, 2016). This is an important reminder that the balance of acceptable trade-offs in any election system is very much a matter of public tastes at a particular historical moment—it is always kairotic and audience-centered. Just as the glass ballot box gave way to systems that promised more secrecy, what citizens consider to be the essential qualities of trustworthy elections (such as tangible interfaces and physical paper trails) could possibly give way to new requirements (such as open source software



and hardware and end-to-end verifiability). Perhaps the only certainty is that larger system of values defining trust is going to shift and evolve in time.

As technical communicators and UX designers are called upon to contribute to electoral systems, they are ideally situated to engage in the rhetorical work of “unblackboxing” voting technologies (Dorpenyo, 2016) and cultivating trust in elections and democratic governance. In doing so, it is helpful to remember not only the broader principles of electoral integrity but how those principles are made meaningful to particular audiences at particular times. To be sure, I am not advocating for any particular approach or technology for reforming election systems in the present article. However, I believe that the technologies considered here—from Jolie’s glass ballot box to Bitcoin’s blockchain—are worthy of examination for what they may reveal about how trust already operates in our electoral systems and how trust might be built in the future. They also suggest an important role is waiting for us as technical communicators. As professionals used to working at the interfaces of users, systems, trust, and technologies, we are well-prepared to help “design democracy” into all parts of the electoral system, from voter registration materials to ballot interfaces to whatever new possibilities emerging technologies may offer.

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# Ethos in Electoral Technology Company Web Spaces

By Matthew Bridgewater

## Abstract

**Purpose:** This project examined the strategies elections technology companies use to establish ethos to clients and stakeholders and suggests implications these strategies have on the constitutional discourse about voting.

**Method:** To manage the scope of the analysis, this project rhetorically analyzes three elections technology companies' "About" pages. These "About" pages are the heart of a company's digital ethos because they describe the mission, scope, history, and expertise of the company to its clients, customers, investors, and the public at large.

**Results:** In addition to expected appeals to expertise, patriotism, and democratic values, these companies also created ethos through business profitability and the impartialness of technology to promote their products and democracy as a whole.

**Conclusion:** An important part of building ethos among elections technology companies is done by appealing to business profitability and the impartiality of technology to promote democratic institutions. This contemporary strategy might reorient democratic discourse, values, and institutions themselves.

**Keywords:** Ethos, democracy, political-economy, voting

## Practitioner's Takeaways:

- Technical communicators and other writers are in positions to identify, create, challenge, and reconfigure frameworks of technology, business, and democracy not just through elections technology companies but through the government itself and other businesses that work with the government.
- How a company positions itself in relation to either the timeless values and institutions of democracy or contemporary political issues is becoming more important for technical communicators.
- Although traditional appeals to ethos remain an important part of ethos creation, contemporary ethos building might be more situated in larger political-economy ecologies.



The U.S. Presidential election of 2016 brought many electoral issues to the forefront: the role of Wikileaks as a political antagonist, potential voter fraud and Russian influence, voter suppression, representational issues via gerrymandering and the Electoral College, and the influence of fake news and the ability of social media to virally disseminate it. The extent to which these issues affected the election is currently a major subject of the news cycle. All of these issues can influence how Americans come to view the success, legitimation, and authority of voting results.

Although there are arguably many ways to legitimize democratic governance, democracy loses its legitimacy unless citizens believe in the integrity of the election process. This is what makes trust in the voting process so important. Election technology, then, imbues democratic office holders with legitimacy. Conversely, a loss of faith in the validity and reliability of elections technology can irreparably harm officials/candidates and undermine the bedrock of the democratic system. This makes the electoral process the circulatory system of democracy. Without electoral technology and processes tabulating votes accurately, quickly, and with public confidence, the rhetorical and legal legitimacy of democracy washes away.

Voting itself seems straightforward, but the election process is remarkably complex. A large reason for this complexity is that electoral rules, procedures, and technology vary in the United States state by state, because states, not the federal government, are largely responsible for conducting elections. Of course, the federal government has had some role in the electoral process. It has stepped in when egregious abuses of power have taken place to limit voting. Constitutional amendments (such as the 15<sup>th</sup> and the 19<sup>th</sup>) and federal legislation (such as the 1965 Voting Rights Act, the “Motor Voter” Act of 1993, and the Help America Vote Act of 2002) have aimed to prevent discrimination, make registering to vote easier, and improve weaknesses and lessen confusion in polling places. Other actions by the federal government, however, such as the Supreme Court of the United States striking down Section 5 of the 1965 Voting Rights Act (*Shelby County v. Holder*, 2013), have arguably led to a suppression of the vote. The Supreme Court has also affected the voting process in other ways. In *Bush v. Gore* (2000), the Supreme Court stepped into the Florida recount, ruling that the recount must stop, essentially declaring George W.

Bush the winner of the 2000 Presidential election. In *Citizens United v. Federal Election Commission* (2010), the Supreme Court ruled that corporations, labor unions, and other organizations can spend unlimited money in an election because that spending is protected as free speech. In Justice Stevens’ dissent in *Citizens United*, he wrote that the ruling opens up the American electoral process to stinging criticism: “A democracy cannot function effectively when its constituent members believe laws are being bought and sold” (*Citizens United v. Federal Election Commission*, 2010, p. 63). In addition, the government at both the state and federal level can sometimes struggle to act at all to deal with electoral issues, as in several cases involving perceived abuses of gerrymandering—the most recent of which being *Gill v. Whitford* (2018). Ultimately, the responsibility falls to states for the validity<sup>1</sup> and reliability<sup>2</sup> of elections.

Elections technologies are not just about the button a voter pushes or lever a voter pulls down. To borrow a concept from Bruno Latour, elections technology is a black boxed technology that belies a complicated and expansive process. The elections technologies network consists of “every piece of hardware and software that is used by local election officials throughout the process of administering elections, from registering voters to conducting post-election audits” (Elections technology toolkit: Election machines and beyond, 2016, para. 1). On its website, the National Conference of State Legislatures organizes elections technologies issues as follows:

- Ongoing: Voter Registration, Maintaining the Voter List
- Before an Election: Selecting Voting Equipment, Designing the Ballot, Pre-Election Testing
- During an Election: Ballot on Demand, Electronic Ballot Submission, Electronic Poll Books, Mail Ballots
- After an Election: Post-Election Audits

As many technical communicators can deduce, there are ample points of contact between our

<sup>1</sup> Whether voters understand what they are voting on (i.e., clarity) is an example of validity. In California, for example, “ballot junk” is a growing issue. California voters often have numerous measures to vote on, and some of them are arguably written to confuse voters.

<sup>2</sup> Whether the election captures the general will of the voters is an example of reliability.

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profession and the state elections technology process. Technical communicators have already breached several entry points for research in elections technology (see Dorpenyo, 2016; Pryor, 2017; and Whitney, 2013). This article examines how elections technology company websites establish ethos, trust, and public confidence with their audiences. While elections technology companies rely on strategies such as appealing to expertise, American history, and American patriotism, they often frame company ethos using the rhetorics of business profitability and the efficiency and impartial good of technology, aligning these rhetorics with the goals of democracy to legitimize the voting process. In doing so, the rhetorics of business and technology often orient and legitimize democratic processes and institutions. This could very well be a sharp difference in the way the democratic process has legitimated itself in the past and in how we envision the foundations of democratic institutions. The rhetorics and ethos of business and technology, then, become the handmaiden of democracy.

Theories of ethos can help us understand and think about electoral technology companies and their place in the electoral process. Similarly, technical communication and rhetoric can help us think about and question broader electoral systems and institutions. Elections technology companies play an incredibly important role in maintaining a legitimate elections process not just in the United States but in any country concerned with fair elections.

Establishing ethos, trust, and public confidence begins at least with Aristotle and continues into contemporary times (e.g., Gatti, 2011; Koller, 2009; Lemke, 1995). This paper first reviews pertinent articles about ethos largely drawn from technical communications writ large. Then, it rhetorically examines three large elections technology companies (Election Systems and Software, Smartmatic, and Dominion Voting), identifying how business profitability and technological impartiality create ethos in these companies' "About" pages to promote trust and confidence in their companies to carry out the sacrosanct duty of conducting fair, honest, and credible elections. This analysis demonstrates that elections technology companies create public confidence and trust by showing their commitment to democracy not just through traditional appeals to expertise or to traditional American tropes but through the ethos and rhetoric of business and technology.

## Literature Review of Ethos in Technical Communication

Ethos, credibility, trust, and trustworthiness are largely similar and have a long history, but some distinctions do exist. Aristotle defines ethos as "persuasion through character" (On Rhetoric, 1.2.4) and further claims that ethos is "the most authoritative form of persuasion" (On Rhetoric, 1.2.4). This is because "we believe fair-minded people to a greater extent and more quickly [than we do others]" (On Rhetoric, 1.2.4). What's important here is that, since rhetoric is concerned with probabilistic matters (On Rhetoric, 1.2.12), the character (ethos) of the speaker is of utmost importance in determining the best course of action. Although Aristotle advocated that ethos was more important than pathos or logos for persuading audiences, this advice was not always heeded: Campbell (1995) and Katz (1992) have convincingly argued that technical communication has often valued logos over ethos as the most important appeal.

Contemporary technical communication literature further complicates ethos. Johnson-Eilola and Selber (2012) characterized ethos as the portrayal of an identity. Anderson (2011) claimed it is "roughly equivalent to credibility" (p. 120), while Cherry (1998) distinguished ethos from "persona." Showing the different histories of both terms, Cherry (1998) claimed that ethos involves the qualities and strategies of speaking and writing that gain trust in a community, audience, or readership, whereas persona is an artificially created identity the writer creates to effectively communicate. Brown (2009) also parsed the concept of ethos by separating it into situated and invented ethos: "One's situated ethos precedes his or her text" (p. 245). In other words, it's tied to the person's reputation ahead of time. The other half, invented ethos, is created "within a speech or text . . . [t]hrough the use of certain tropes and figures along with various other textual strategies" (p. 245).

Establishing ethos online is particularly relevant to technical communicators. For example, how can technical writing teachers best nurture an ethos-building environment when teaching online? Building on Cherry's distinction between ethos and persona, Pickering (2009) used activity theory to show how students in an online technical writing class developed ethos through interaction with the online class

community, adjusting their online ethos building strategies (tone, grammatical correctness, how they disagreed with classmates) over the course of the semester to create a persona that was a better fit (or not) for communicating in the online environment.

Jo Mackiewicz (2010a; 2010b) focused on another online area of interest for technical communication: product reviews and how consumers establish their expertise and credibility. Her project extended through two separate articles, and, in her first article for that project, she classified assertions of expertise into three categories: “assertions of product-specific experience,” “assertions of familiarity with related and relevant products,” and “assertions of a relevant role” (such as having formal training in the product or having employment related to the product). As Pickering (2009) showed the creation of ethos and persona through social interaction, Mackiewicz’s second article on her project examined the role reader feedback and online interaction played in creating ethos. Essentially, Pickering (2009) and Mackiewicz (2010b) showed the importance of the social construction of credibility to technical communicators: It’s not just a one-way street where the communicator simply projects and doesn’t need to adjust his or her ethos based on the audience’s reception.

Credibility and ethos are important for technical communicators, because they are readily projected through online mediums such as social media and websites. Social media differs from websites, however. Social media is meant to be updated frequently, to be “live,” to be timely and even ephemeral in its content, and to grab attention through humor, entertainment, and wittiness, usually done using images/memes/videos/gifs and with minimal text. It’s also usually more mobile friendly. In fact, users can only use Instagram fully through the mobile app; Instagram.com does not allow for the uploading of pictures, for example. Some research (Bowdon, 2014) has shown that students, although familiar with social media through personal experience, often struggle to use it for professional organizations. Specifically, Bowdon’s (2014) research showed a failure to communicate “audience-centered, immediately relevant, locally focused information” (p. 43) in emergency communications disseminated through social media.

Website analysis similarly showed dysfunction when trying to create ethos. Spoel’s (2008) article suggested that the midwifery websites she analyzed don’t generate

“communal and dialogic modes of communication with the public,” and instead “enact [a] primarily unidirectional consumption model” to establish ethos when establishing “professional identities, health-care relationships, and forms of community” (p. 264). In other words, quite unlike Mackiewicz’s (2010b) understanding of an ethos created socially in product review websites, many other business websites fail to engage their visitors in this manner.

Everett (2013), Alberts and van der Geest (2011), and Lanier (2017) have also written on how website design can directly lead to perception of a website’s credibility. Focusing on small businesses, Everett (2013) noted that folks without much training in website development or IT create and maintain these websites. This can cause problems when the website doesn’t meet visitors’ more professional expectations. Everett (2013) proposes working with the tools small businesses have available and offers Prominence Interpretation Theory as a resolution to help identify credibility issues and then improve the website’s credibility using this relatively simple and affordable method. Alberts and van der Geest (2011) also evaluate the credibility of websites via how different color schemes effect trustworthiness. Although the relationship between trustworthiness and a certain color is not universal, their study showed that blue and green were the most trustworthy colors in several contexts they evaluated.

Lanier (2017) examined websites through RWD (Responsive Web Design), the lens of the new “standard for mobile-friendly websites” (p. 7). Websites, of course, often appear differently in different browsers, and they can appear much differently depending on the device being used to view the site: “When RWD is used, the website loses information units, it loses graphics, and it changes formatting—these are not merely design differences; they are dramatic changes that potentially lead to significant differences in credibility” (p. 7). After highlighting variables that affect credibility on websites, Lanier compared the differences in appearance on “Full” and RWD websites. He then outlined some suggestions unique to RWD websites to improve credibility: “ensure that the sponsoring organization’s logo is placed prominently at the top of the page,” “allow the logo to remain in view” throughout their site browsing,” “ensure the author’s name, title, and perhaps even image is placed before the content,” and “[b]e calculating about the graphics you use in the

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RWD site” (p. 10). These last four sources (Bowdon, 2014; Everett, 2013; Lanier, 2017; Spoel, 2008) showed different ways of engagement in the field of technical communication to characterize and improve credibility in online mediums.

After reviewing the literature from the past several years, mostly in major technical communication journals, two trends appear in technical communication in regard to ethos: 1) Technical communication has specifically looked at the creation of ethos established in online environments. This research has specifically examined the creation of ethos in online technical communication, in organizational social media practices, in the creation of reputation and expertise building in online message boards of sorts, and in company and organizational websites. And 2) The concept of ethos itself has been complicated by comparing it to related concepts such as trust, trustworthiness, reputation, competence, credibility, and persona; dividing it into situated and invented ethos; and understanding the co-construction of ethos between audience and rhetor. Adding to this discussion of ethos in technical communication, this article identifies the importance of the rhetoric of business profitability and technological impartiality in orienting the ethos of broader electoral systems and processes.

### Methods

The first part of this article provided a literature review to help technical communicators understand the contemporary history of ethos in technical communication. Analyzing elections technology companies allows us to examine a black boxed industry—an industry at the epicenter of legitimizing political power. To manage the scope of the analysis, this paper specifically looks at the “About” pages, the heart of a company’s digital ethos, because it describes the mission, scope, history, and expertise of the company to its clients and customers (in the American context these are largely state governments), investors, and perhaps some very inquisitive members of the public at large. These “About” pages introduce the company to clients, customers, and other stakeholders, and invites them to do business with the company. Their very purpose is to build rapport.

These three large and pervasive elections technology companies (Election Systems and Software (ES&S),

Smartmatic, and Dominion Voting) are hardly household names, and a brief introduction to these companies will help familiarize readers to this small but important industry. By understanding how ethos is constructed in these spaces, technical communicators become more aware of the relationship between business, technology, and democratic government.

### Ethos Building Through Business and Technology and the Reorienting of Democracy

To manage the analysis of ethos, I’ve selected “About” pages from ES&S, Smartmatic, and Dominion Voting (there referred to as the “Company” page). These pages remain the epicenter for how a company establishes ethos. “About” pages include a variety of information relevant to the construction of company ethos. They can present the company’s purpose, values, and history of the company, and biographical information about the people leading the company. While this page provides information and describes the company, it’s also a contact point to connect with customers and an important way to market the company. This page helps differentiate the company from its competitors by branding the company in a memorable way for visitors.

ES&S’s “About” page is organized into five sections: Mission, Vision & Core Values; Management Team; Our Pride, Our Purpose, Our Passion; ES&S Canada; and Careers (see Figure 1). The first section, “Mission, Vision & Core Values,” declares ES&S “is dedicated to providing valuable, trusted, and proven election equipment and services,” aims “to meet the needs of our customers,” and fulfills their “mission by delivering the highest standards of accuracy, security, and reliability in our election products and services” (para. 2). ES&S’s vision is “to maintain voter confidence and enhance the voting experience.”



**Figure 1. ES&S’s “About” page organized into five sections and a “Company Overview” statement**



ES&S uses other strategies, both visual and textual, to create ethos. A video on the “About” page (see Figure 2) shows hardworking employees, patriotic American images, and images of voting machines and ballots. The video carefully states that “our products aren’t about an ideology, not concerned with left, right, or middle. Our dedication is to supporting a tradition celebrated around the world. One person. One vote.” But at many other points, ES&S uses the rhetoric of business and technology to establish ethos. The “About” page tends to focus on appeals to business through values such as “providing valuable, trusted, and proven election equipment and services” and “customer service.” They also create ethos by emphasizing technology issues “by delivering the highest standards of accuracy, security, and reliability in our election products and services.” Connecting the mission of democracy to their technological savvy, they claim in the video that their business does the work “our forefathers envisioned centuries ago, though our methods are something they could’ve never imagined.” Finally, they appeal to their business reach: This part of the video highlights ES&S serving both large and small municipalities, urban and rural, and that 60% of Americans “cast their ballot on an ES&S system.”

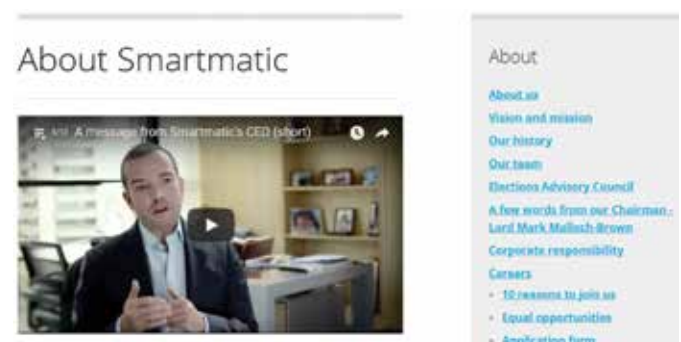


**Figure 2.** ES&S’s 2-minute video that presents several ethos-building concepts

Smartmatic shares many of the ethos building values that ES&S showcased in their page, including appeals to business to build ethos. Smartmatic emphasizes that the work they do helps create “political stability,” which benefits investors. In the “Vision and Mission” section, the final part of their four-part pledge aims to “[p]rovide the best products and services” and

“to deliver the best products at the best prices.” In the video, the CEO of Smartmatic also points to an example of how a well-run election in the Philippines caused the value of the peso to rise.

Smartmatic also appeals heavily to technology to build trust and credibility in their elections technology products. The video (see Figure 3) embedded on the “About us” page highlights that “Integrity is the lifeblood of democracy” and that they have “developed innovative technologies to guarantee the efficiency and trustworthiness of elections.” In the “Vision and Mission” section, they boldly claim that “the future of democracy is digital.” And the first three parts of their four-part pledge all emphasize technology. They first pledge to “remain impartial and independent—technology is neutral and so are we.” They then pledge to “harness the full power of technology—to deliver reliable and accurate results, eliminating the possibility of human error.” Lastly, they pledge to “maintain the highest standards of transparency” and they “will keep inviting the public to audit and scrutinize our technology throughout the entire cycle of an election.”



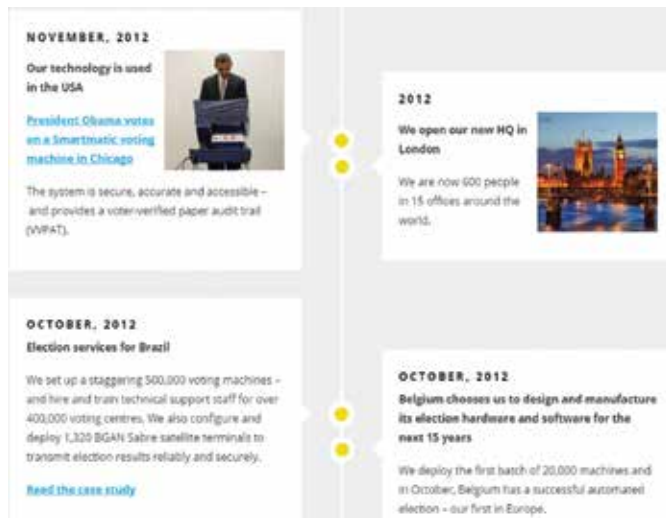
**Figure 3.** Smartmatic’s “About” page organized into eight sections with a video that presents several ethos-building concepts

Smartmatic also frames its company history in the “Our history” page through the lens of technology. Born soon following the 2000 U.S. election between George W. Bush and Al Gore and the hanging chad controversy that surrounded it, the company’s history focuses almost entirely on how they’ve advanced elections technology (e.g., making elections technology more secure but more transparent, utilizing technology in the registration process, growing fully digital voting methods) since then. This “moment of conception” is also when voting itself became un-black boxed for

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many Americans. Although voting has always been a problematic issue for some demographics, the “hanging chad” controversy showed how vulnerable the electoral system was to breaking down in mundane fashion, let alone due to political or socio-economic influences.

Smartmatic also promotes itself by showing how it operates in a variety of international contexts, highlighting work done in developed countries (e.g., the United States, Belgium) and developing countries (e.g., Venezuela, Brazil, Zambia, Mexico, and the Philippines). This takes us to Smartmatic’s appeals to expertise and other endorsements. One can see (see Figure 4) former President Barack Obama voting on a Smartmatic machine in Chicago, and former President Jimmy Carter is quoted in 2012 as saying that the Smartmatic voting system in Venezuela is “the best voting system in the world.” The company similarly includes voices from election officials in Argentina and voters in Haiti.



**Figure 4. Part of Smartmatic’s use of a timeline to establish ethos through historical narrative**

The rhetorics of business and technology, here and elsewhere, reconfigure the values of voting and indeed of the democratic process itself. They reframe the historical presentation of elections and voting, what it means to be “diverse” and other democratic values, by reorienting them toward the values of business and the inherent benefits of technology.

Dominion Voting’s “Company” page is organized into four sections (see Figure 5): Overview, Values, Management, and Employment Opportunities. In the first section, “Overview,” the first appeals to ethos

use business rhetoric and technology. For example, the first sentence in the “Overview” section reads: “In today’s election market, Dominion Voting Systems sets itself apart with a commitment to customer service, convenience, and a superior use of technology to provide you with the best possible tools possible to meet your election challenges.”



**Figure 5. Dominion Voting’s “About” page organized into four sections**

This is followed by creating ethos through history by displaying an infographic timeline that spans 100 years of election technology history (note that the company was founded in 2003, directly in response to the 2000 American Presidential election). Appeals to business and technology intertwine in Dominion Voting’s “Company” page as the organization emphasizes that it’s a “results-driven organization” focused on customer satisfaction that focuses on electoral “success.” The history of voting connects directly to technological concepts such as “innovation,” “engineering,” “constant research,” and “development and quality control.” This appeal to progress focuses on technology but not on social concerns.

In addition, Dominion highlights four values that all appeal largely to the values of business and technology:

- Understanding the importance of efficient, secure and accurate elections
- Transparency and accountability in all that we do – on every level, for every election
- Standing by the services and products that we provide
- Striving for technological and service delivery excellence to meet today’s election challenges

The values emphasize efficiency, security, and accuracy; transparency and accountability;

technologically advanced products; and a warranty of sorts. These four values further link appeals to business trustworthiness to technological savvy.

Through an examination of all three companies, one can see the prevalence and relevance of business and technology rhetorics building company ethos.

## Implications

Elections technology companies provide researchers a significant space to examine the relationship between the rhetorics of business, technology, and democracy. Although elections technology companies appealing to business profitability and technological impartiality might seem natural since they are companies selling technologies, I argue this is going further than typical need, branding, and marketing. These companies are constructing a specific framework characterizing the democratic process. In creating an ethos around business profitability and technological impartiality that appeals to government audiences and investors, elections technology companies also reorient the rhetorical framework of democratic processes and institutions by legitimizing it through the principles of business profitability and technological impartiality. Moreover, elections technology companies are important actors in a larger conversation that helps to frame the democratic process.

Other companies and organizations are repositioning themselves and reorienting the conversation and framework about democracy more directed to the public. Hobby Lobby wasn't afraid to launch a lawsuit over the Affordable Care Act's birth control mandate. Patagonia has come out harshly against President Trump's slashing of the National Park budget and other infringements on the environment. And Burger King has even posted a YouTube video attacking Net Neutrality. In 2017, the National Football League, after years of the League working to ally itself with and build business and advertising relationships with the United States military, found itself embroiled in political issues surrounding player protests. Creating an ethos as a conservative company or a pro-environment company, or foraying into other issues, can increase brand awareness, loyalty, or trustworthiness in specific constituencies important to the business. In regards to elections technology companies, their more specific and non-public audiences allow for a different kind of

reorienting, one that speaks directly to those who make decisions about voting and the process of democracy in their constituencies.

The ethos-building rhetorical strategies used by elections technology companies also use expertise, American metaphors, and American history to create trust in an audience evaluating and deciding on elections technology to carry out electoral processes and enact values. But technical communicators should pay attention to other significant frameworks used to create ethos. While Pickering (2009) and Mackiewicz (2010a; 2010b) showed the importance of adjusting ethos over time depending on social situations, I wonder how long appeals to business and profitability and technological impartiality have justified the use of electoral processes. Since the 1980s, there has been a reorienting of many First Amendment legal issues around the concepts of corporate personhood, giving free speech and religious freedoms to businesses (Liptak, 2018). Ultimately, these ethos-building strategies and the reorientations they cause can have profound implications for how democratic principles are conveyed and justified in a variety of other communicative situations.

## Conclusion

These elections technology companies gesture to other appeals—for instance, expertise, American patriotism, and American history, and democratic principles (e.g., “one person, one vote”). But business and technological appeals significantly orient the ethos of elections technology companies. The claims of this paper hopefully encourage technical communicators to consider the following questions:

- What do we gain or lose by largely framing the democratic process in terms of business profitability and technological impartiality? How does this framework serve or not serve citizens of a democracy?
- When ethos is established via the rhetorics of business profitability and technological impartiality, what does this mean for decision making in democracy?
- What happens when voting procedures and institutions are outsourced? Does this result in democracy being “bid” on?
- How disruptive (both in good and bad ways) is this new voting technology?

## Ethos in Electoral Technology

- How can we create an ethos and other rhetorical voting frameworks that balance the needs of all stakeholders?

I believe that technical communicators and other writers are in positions to identify, create, challenge, and reconfigure frameworks of technology, business, and democracy both as practitioners and as critics. For example, website designers, content developers, and marketers can analyze “About” pages they are privy to or that interest them and identify relevant ethos-building frameworks for business, technology, democracy, or other frameworks and consider the ways they brand and position a company. Second, companies and organizations that do business with the government might be particularly interesting sites to analyze the relationship among metaphors, actors, and frameworks of business, technology, and the ideals of democracy. Ultimately, technical communicators can participate in identifying the roles business and technology can play in enhancing electoral integrity while also using technical communication and rhetorical theories.

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### About the Author

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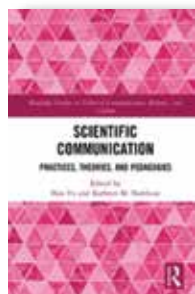
# Review of Four Books on Scientific Communication

Diane Martinez

## Introduction

This series provides reviews of four books that fall under the umbrella of scientific communication. The range of subjects may be of interest to practitioners and instructors who teach science writing, because composing effective scientific communication involves using distinct approaches and strategies as well as understanding the impact and implications of what we write. The books in this series address theories and pedagogies, skepticism about how science is used in scientific writing, scientific writing as a craft, and “commonplaces” or common arguments found in environmental discourses.

## Scientific Communication: Practices, Theories, And Pedagogies



Contemporary, public scientific discourse is marked by a divergence of opinions as to what constitutes science and an even wider chasm over disputes about how science is used in public policies. This current turmoil is not only of concern to scientists; scholars in technical and professional communication are at the center of

these discussions, too, due to the intersection between science and communication. In response to current issues regarding scientific discourse, *Scientific Communication: Practices, Theories, and Pedagogies* was written to specifically address how to “teach science students to produce more effective and ethical communication [...] and] how to teach students in communication and rhetoric to be critical readers, writers, editors, and critics of scientific discourses” (p. 4).

The book is divided into two parts. Part I is dedicated to “Practice and Theory,” which provides context for a variety of contemporary issues in scientific

communication. Chapters in this section cover topics like differentiating between science communication and scientific communication; shifting roles of scientists from “one communicating *to* the public to one communicating *with* the public” (p. 33); examining ethical authorship; and, understanding scientific commercialization where information and results from studies are withheld from the larger scientific community, which directly opposes an open scientific society where sharing information is key to making scientific advancements. Other chapters address how scientific visuals shape perception of a topic; explore ways that science information is accommodated, distributed, and changed over social media; and examine public science communication through museum exhibits. “Practice and Theory” is a necessary scaffold for Part II, “Pedagogy and Curriculum.”

The chapters in Part II relate directly to teaching scientific communication and espouse the viewpoint that “future scientists should be held accountable for engaging with societal values to further aims of a democratic civil society” (p. 207). In other words, these chapters echo one overarching theme in Part I: science is social and advances in science have social implications; therefore, those people like scientists or journalists who communicate science have a public responsibility. Chapter topics include the rhetorical nature of scientific communication and how to encourage students to critique and re-imagine current scientific communication practices rather than emulate them. Other chapters explore best approaches for teaching science communication in face-to-face and online environments, include a training model for teaching graduate students to provide meaningful feedback that helps students learn about conventions of science writing and improve their writing skills, and demonstrate how to use Wikipedia to teach about and improve science communication. All pedagogy chapters include helpful reading suggestions and example assignments.

*Scientific Communication* is a treasure-trove of information about contemporary issues regarding scientific discourse, theory, and practice of science communication. The only issue I noticed was the odd insertion of graphics in the middle of the book where the pages were unnumbered and the graphics were not titled. Aside from that anomaly, this book is a valuable and important resource for scholars and educators in science, rhetoric, and writing programs.

### Scientific Method: How Science Works, Fails to Work, and Pretends to Work



A subject of debate in the last few years is how scientific studies and research are used in the media and by governments, especially in terms of policy making. Numerous articles and books have addressed this topic, yet there is a persistent problem of citizens and government officials (whether they are scientists or not)

either not understanding the scientific method or inaccurately applying data or results from research studies as the basis for public policies and regulations. I do not disagree that “there is a need for citizens to understand science [...] not just the major facts, but the methods used in different sciences, and their limitations” (p. vii); however, John Staddon’s *Scientific Method: How Science Works, Fails to Work, and Pretends to Work* is not that book.

Staddon misses his goal of helping readers assess the deluge of scientific information that the public is confronted with daily. First, the book fails due to poor writing. Obviously, a book about the scientific method is going to use technical information and scientific studies; however, the book is a poor example of clear writing, most especially clear scientific writing. Figures and tables are not labeled or titled, which makes references to them ambiguous and confusing. Sentences, even paragraphs, are constructed without attention to style or audience, where the writing comes across as a long freewrite or a conglomeration of classroom lecture transcriptions. Non-stylistic fragments exist, and there are long-winded sentences that are difficult to follow, not because of the technical information, but because of the lack of attention to sentence construction and paragraph development.

Along with confusing writing, there is a plethora of “trust me” language where summaries of studies used as examples are not complete enough for readers to understand not only the experiments under discussion but Staddon’s conclusions. This language is extended to the mention of past and present scientists, economists, investors, and even books that are pronounced as popular, great, brilliant, or problematic without follow through to support such claims. The writing is gendered by use of the generic “he” except when referring to experimental subjects or when a female is used as an example, and then there are statements like “Clever men [...] will always gain a following” (p. 70) and off-handed, irrelevant comments like Keynes being “happily but improbably married to a strong-minded Russian ballerina” (p. 84), or “young women these days seem to favor deliberately torn blue jeans. These garments, which look as if they have been salvaged from the trash...” (p. 84). Even though the blue jeans are being used as an example, the latter comment is totally irrelevant to the discussion and there is no need to associate this fashion trend with women only, as men wear these types of jeans, too. And last, the selection of examples, the arguments presented, and the people and research that are held up or questioned are politically partisan that *Scientific Method* is biased, which detracts from its message.

### The Craft Of Scientific Writing, Fourth Ed.



It is difficult to find a textbook that can complement the various ways a subject may be taught, but Alley’s *The Craft of Scientific Writing*, 4<sup>th</sup> ed., may be one exception. Even though the first few chapters give the book a slow start where Alley makes a rather weak case that scientific writers have greater burdens than other writers, he shines

from Chapter 3 on to the end through his discussions and examples on honing scientific writing. His approach to teaching about scientific writing is to examine writing versus a primer on genre. It is his approach that makes this book an excellent accompaniment to a variety of courses that deal with technical and scientific writing.

Like most writing books, this one covers audience, purpose, and occasion, as well as word choice to

## Review of Four Books on Scientific Communication

enhance clarity, avoid ambiguity, and sustain readership. Style is addressed through chapters on sentence construction, organization, and integration of graphics and equations. Genres of email, instructions, and proposals are also covered; however, instead of a section-by-section approach for each genre, Alley focuses on how intended audiences use and approach reading such documents. He then gives guidance on organization, structure, language, tone, and writing strategies. The focus on writing strategies allows instructors who might use this book to cover genre, drafting, and revision in ways that pertain to their own particular classes. One of the most effective aspects of each chapter is the color-coded examples. The red (poor) and blue (exemplary) examples give the content richness and foundation through this visual enhancement that makes it easier to spot differences in the compared examples and complements the explanatory text. Appendixes on sentences, punctuation, usage, and format are not the usual abbreviated grammar lessons; instead, they address the most common mistakes found in engineering and scientific writing. Alley gives thorough explanations and color-coded examples about what constitutes a problem and how to fix it, and visual indicators help readers discern the severity of issues being critical, distracting, or cosmetic.

*The Craft of Scientific Writing* is a book that can be valuable to practicing writers who want to work toward more effective, clear scientific writing for a variety of audiences. It could also easily be adapted to several classes that teach about technical and scientific writing, in which case it would be helpful to have writing exercises at the end of each chapter.

### Commonplaces of Scientific Evidence in Environmental Discourses



At a time when discussions about science and the environment are knotted with confusion and divisiveness about who is a “real” scientist or what is “true,” Denise Tillery’s *Commonplaces of Scientific Evidence in Environmental Discourses* offers clarity. Tillery identifies eight “commonplaces”—“common lines of argument circulating within a given topic” (p. 16)—as recurring themes in environmental discourses.

These commonplaces “represent strategies writers use to adapt evidence to their rhetorical contexts, disprove or challenge evidence hostile to their arguments, and relate sometimes highly technical arguments in terms that resonate with their audiences” (p. 20). These commonplaces are also partly responsible for the confusion and divisiveness that shadow discussions about science and the environment, so understanding these commonplaces helps people “see through” arguments in mainstream news, popular environmental writing, and the science used in public policies.

The book is divided into five chapters with an introduction that identifies eight commonplaces and provides a brief history of American environmentalism, a literature review, methods, explanations, and brief examples of each commonplace. Subsequent chapters include an examination of commonplaces in six works that have significantly impacted environmental discourses: *Silent Spring*; *Cadillac Desert: The American West and Its Disappearing Water*; *An Inconvenient Truth*; *Field Notes from a Catastrophe: Man, Nature, and Climate Change*; *Collapse: How Societies Choose to Succeed or Fail*; and *Hot, Flat, and Crowded*.

Since “one of the purposes of this genre [popular environmental writing] is to present arguments that readers can reuse in different contexts” (p. 43), it is important that readers understand how commonplaces are used to make the arguments that they may use themselves in conversations or as the basis for their beliefs on an environmental topic. A case study on Project GREEN: Friends of Pittman Wash make up the next chapter where Tillery analyzes commonplaces found in print and electronic media associated with this advocacy group. Through this case study, Tillery demonstrates how the balance of power can be shifted from government agencies making decisions that impact a community to “one where citizens and local communities shape decisions at the local level” (p. 110). Commonplaces found in visual environmental rhetoric is discussed in the fourth chapter, which presents a detailed discussion about the transformation of graphics from scientific to popular media contexts, specifically the controversial CO<sub>2</sub> and “Hockey Stick” graphs used in *An Inconvenient Truth*.

Tillery ties up her discussion in the Conclusion where she presents insightful arguments about the positive and negative—as well as the unintended—consequences of using the eight commonplaces in



environmental discourses. Her final argument is not to rid environmental discourses of these commonplaces but rather for writers and readers to recognize them, understand the consequences associated with such narratives, and, finally, use the commonplaces as “heuristics,” which, in some cases, is a combination of several commonplaces that present more sophisticated, accurate, and engaged communication practices.

*Commonplaces of Scientific Evidence in Environmental Discourses* would be a useful book for a graduate class on environmental or science writing as it would provide a foundation for students to examine selected readings for these commonplaces, research the influence of the texts based on the arguments presented and recycled, and reflect on effective use of the commonplace Tillery says is the “simplest to describe but the hardest to implement” (p. 160): science as a source of information to be used when making decisions about environmental issues.

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## About the Author

**Diane Martinez** is an associate professor of English at Western Carolina University where she teaches professional and technical writing. She previously worked as a technical writer in engineering, an online writing instructor, and an online writing center specialist. She has been with STC since 2005.

## Review of Four Books on Scientific Communication

**Table 1: Summary of Reviews**

	<b>Scientific Communication: Practices, Theories, and Pedagogies</b>	<b>Scientific Method</b>	<b>The Craft of Scientific Writing</b>	<b>Commonplaces of Scientific Evidence in Environmental Discourses</b>
<b>Audience</b>	Academics, practitioners, graduate students	Academics, journalists, general publics	Practitioners, undergraduate and graduate students	Practitioners, academics, general publics
<b>Major Strengths</b>	<ul style="list-style-type: none"> <li>• Addresses wide range of topics related to scientific communication</li> <li>• Helpful chapters on teaching scientific writing</li> </ul>	<ul style="list-style-type: none"> <li>• None found</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic approach to learning scientific writing</li> <li>• Color-coded examples</li> <li>• Useful for a variety of classes related to scientific writing</li> <li>• Affordable</li> </ul>	<ul style="list-style-type: none"> <li>• Commonplaces explained with relevant examples that demonstrate how such arguments are used in environmental discourses</li> </ul>
<b>Major Weaknesses</b>	<ul style="list-style-type: none"> <li>• Unexplained collection of graphics in the middle of the book</li> <li>• Price may be prohibitive for classroom use</li> </ul>	<ul style="list-style-type: none"> <li>• Poor writing that is also biased and exclusionary</li> </ul>	<ul style="list-style-type: none"> <li>• No writing exercises included</li> </ul>	<ul style="list-style-type: none"> <li>• Price may be prohibitive for classroom use</li> </ul>
<b>Comments</b>	Highly recommended for practitioners and graduate-level classes	Not recommended	Recommended for classes designed to teach students how to write clear, scientific prose	Recommended for graduate classes, practitioners, and academics
<b>Rating</b>	*****	*	*****	*****
<b>Cost</b>	\$US150.00	\$US52.95	\$US34.95	\$US150.00

## Books Reviewed in This Issue

### Language and Meaning ..... 438

Betty J. Birner

### Videocracy: How YouTube is Changing the World...with Double Rainbows, Singing Foxes, and Other Trends We Can't Stop Watching ..... 438

Kevin Allocca

### Business Ethics: Best Practices for Designing and Managing Ethical Organizations ..... 439

Denis Collins

### The Introverted Leader: Building on Your Quiet Strength .... 440

Jennifer B. Kahnweiler

### Is English Changing? ..... 441

Steve Kleinedler

### Project Management for Humans: Helping People Get Things Done ..... 442

Brett Harned

### Writing Business Bids & Proposals for Dummies ..... 442

Neil Cobb and Charlie Divine

### Technology in School Classrooms: How It Can Transform Teaching and Student Learning Today ..... 443

James G. Cibulka and Bruce S. Cooper, eds.

### Fighting Fake News!: Teaching Critical Thinking and Media Literacy in a Digital Age ..... 444

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Jamie Steane and Joyce Yee

### The Moderns: Midcentury American Graphic Design ..... 449

Steven Heller and Greg D'Onofrio

### Gender in Communication: A Critical Introduction ..... 450

Catherine Helen Palczewski, Victoria Pruin DeFrancisco, and Danielle Dick McGeough

## Language and Meaning

Betty J. Birner. 2018. New York, NY: Routledge. [ISBN 978-1-138-21824-6. 154 pages, including index. US\$29.95.(softcover).]



While Birner's survey *Language and Meaning* is for spoken language, it can easily apply to written. One example of that relationship is Noam Chomsky's "Colorless green ideas sleep furiously" (p. 9), which demonstrates how meaning can be tied to language. "Colorless," to take the first word, can signify for the

writer one thing and something else for the user. A grammatical instant suggests that colorists will modify something. Another difficulty is that there is an instinct that suggests that the whole word group is a sentence (it "feels" like the word group should be a sentence), but where are the parts and their relationship? Yet another aspect of colorless is its context. Here, perhaps the user is looking for a part among other parts.

You were no doubt taught in technical communication classes that letters combine to form words (semantics) and words to form sentences (grammar) within contexts (pragmatics). Birner points out that you are partially right. What is particularly missing is the "intent."

The writer has an intent when relating words, and the user likewise has an intent in mind when reading that word.

If we take "colorless," the writer could mean the absence of color while the user understands "undistinguished. Hence, mis-communication or, at best, ambiguity.

If this relation among the factors is confusing enough, Birner goes on in three more chapters plus a conclusion to explain how language and meaning relate: philosophy and language (2); semantics and language (3); and pragmatics and language (4).

The conclusion summarizes the fundamental issues (historical) and the current issues. Birner also lists details on different approaches to both historical issues and current ones. She points to additional reading for more information relating to meaning and finally points to additional readings.

As for other approaches to language and meaning, Birner treats the philosophic, semantic, and pragmatic answers to the question, "What is meaning?" Her

approach is primarily true—conditional which means to be free of context. She also takes the compositional approach where words come together to form the sentence following grammatical rules.

Relevance for the technical communicator comes when communicating words and sentences to those who need them. Reading through *Language and Meaning* gives you an insight into the complexities of language and meaning and thus points to a potential problem of ambiguity. A series of paragraphs in the conclusion makes clear how vital it is for technical communicators to convey the exact meaning that the user needs.

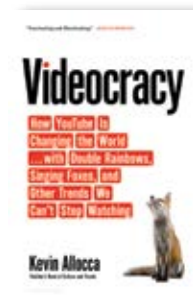
*Language and Meaning* is a scholarly treatment of the question, "What is meaning?", and as such has references and cross-references. However, unlike some scholarly books, scholarly apparatus does interfere with reading the text. For technical communicators who rely heavily on the reader understanding the text, this book will provide the necessary overview.

### Tom Warren

Tom Warren is an STC Fellow, Jay R. Gould Award for Excellence recipient, and professor emeritus of English (technical writing) at Oklahoma State University, where he established the BA, MA, and PhD technical writing programs. Past president of INTECOM, he served as guest professor at the University of Paderborn, Germany.

## Videocracy: How YouTube is Changing the World... with Double Rainbows, Singing Foxes, and Other Trends We Can't Stop Watching

Kevin Allocca. 2018. New York, NY: Bloomsbury Publishing. [ISBN 978-1-63286-674-5. 336 pages, including index. US\$28.00.]



In *Videocracy: How YouTube is Changing the World... with Double Rainbows, Singing Foxes, and Other Trends We Can't Stop Watching*, Allocca examines key trends of Internet video. His central message points to the sociocultural impact of video that is achieved through its power to transcend communication boundaries and transform human interactions.

Allocca begins by discussing the history of YouTube and how to measure a video's influencing power. Perhaps most significant is the true value of a "view." He



says, “*how* something gets viewed is often more telling than *whether* it was viewed” (p. 8). Additionally, it’s not necessarily the content itself that holds transformative power—it’s how people respond to and interact with it. Allocca also points to our affinity for “authentic human experiences” and the importance of “audience engagement.” He suggests that the most influential videos depict real human emotions and reactions, acknowledge viewers, and invite them to participate. They are successful because “*everyone* is part of the experience and the creators’ stylistic choices reflect an awareness of the audience” (p. 34). “Sharing” is perhaps the most important factor contributing to a video’s influencing power. Sharing metrics are the closest we’ll get to “measuring whether a video had created an emotional experience that made viewers feel connected to other people” (pp. 42–43).

The middle chapters depict notable video trends and examine how each has contributed to the advancement of our culture. First, there is “remixing”, which Allocca describes as a new form of creativity enabling people to create their own renditions of popular videos. The next chapters dissect video’s role in music, advertising, current events, and “how-to” videos. Allocca also explores video “niches”, or interest-driven communities that have a unique ability to empower those who are misunderstood or marginalized, followed by an intriguing analysis of “Oddly Satisfying Videos” that cater to our unconscious needs and desires.

Finally, Allocca defines what it means for a video to be “viral”, and reiterates the powerful influence that video has in our lives. Throughout *Videocracy*, he alludes to a shift in power towards everyday individuals, away from those fueled by money and status. Although the ability to empower everyday people has its benefits, it comes with a price—most of us don’t realize the level of impact that any video could have on our society.

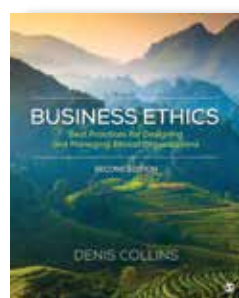
Allocca’s book offers many takeaways for technical communicators—but the following can be appreciated by all: Just because our content is technical doesn’t mean it can’t be influential or transformative. We have the power to encourage new ways of interacting with the world. We can strive to provide greater context for users by paying closer attention to trends, particularly on content-generating platforms like YouTube. By participating in the conversation, we gain a deeper understanding of people’s real needs and how they are using content to better their lives.

### Amy Dunbar

Amy Dunbar is an STC member and a technical writer for Pearson VUE in Bloomington, MN. She has a degree in biology and a graduate certificate in technical communication from the University of Minnesota. Amy’s professional interests include content marketing, video production, and information design.

### Business Ethics: Best Practices for Designing and Managing Ethical Organizations

Denis Collins. 2019. 2nd ed. Los Angeles, CA: SAGE Publications. [ISBN 978-1-5063-8805-2. 568 pages, including index. US\$110.00 (softcover).]



The second edition of *Business Ethics: Best Practices for Designing and Managing Ethical Organizations* is a robust how-to on the creation and implementation of creating and maintaining an ethical organization. Collins uses his 30 years of teaching business ethics

to create a textbook that walks the reader through identifying moral and ethical situations, learning how those situations have developed, creating a vision for handling such situations appropriately, and implementing strategies for maintaining an ethical culture. These ideas are broken into five parts using the systematic format of the Optimal Ethics Systems Model. This format allows Collins to explain the ideas in detail with real-world examples and case studies in which an organization did (or didn’t) practice the ethical concept.

This edition is written in the same fashion as the first with the following enhancements:

- Updated information to include new research.
- Various content reorganization including new sections, figures, and tables.
- Added “Optimal Ethics System Check-Up” surveys which summarize best practices.
- Added “What Would You Do?” ethical dilemmas scenarios to many chapter introductions.
- Added “Ethics in the News” or “Up for Debate” in which related information is highlighted for class discussion or assignment.

These enhancements provide opportunities to further class discussion and learning opportunities. For

example, Part 1 introduces the chapter with a “What Would You Do?” scenario in which you (the reader) are a project manager and responsible for creating and overseeing project time and budget estimates. As the project manager, you’ve been asked to provide an inflated time and budget estimate to ensure performance goals are met. Do you inflate your research or not? These added scenarios test your understanding of ethics by putting you in the “hot” seat. It can be easy to point the finger at what was done wrong, but when you’re the one making the tough decision, you can see how easy some of these situations happen.

In addition, *Business Ethics* offers digital resources for instructors and students on the SAGE edge website. For students, these resources include study materials such as flashcards and quizzes, related videos and multimedia content, and learning objective summaries. For instructors, these resources include test banks for assessing students, editable PowerPoint slides, lecture notes, and classroom exercises and activities. This wealth of information makes it easy for instructors to use *Business Ethics* and for students to learn.

In conclusion, Collins has improved *Business Ethics* in a second edition with improved organization, updated research, and new sections for discussion and thought. The format and new sections make this textbook a wonderful resource for both instructors and students.

#### Sara Buchanan

Sara Buchanan is an STC member that serves as the NEO STC community newsletter editor and is the membership manager for the IDL SIG. She is a technical writer at LCS in Cincinnati, OH for the software, Rent Manager.

#### The Introverted Leader: Building on Your Quiet Strength

Jennifer B. Kahnweiler. 2018. 2<sup>nd</sup> ed. Oakland, CA: Berrett-Koehler Publishers, Inc. [ISBN: 978-1-5230-9433-2. 188 pages, including index. US \$20.95 (softcover).]



*The Introverted Leader: Building on Your Quiet Strength*, 2<sup>nd</sup> ed., is an excellent resource for introverts looking to build on their leadership potential, as well as extroverts who want to maximize their interactions with introverts on their teams.

Kahnweiler cites recent research on introverted leadership, as well as a change in culture and attitude regarding introverts as leaders. She calls this transformation the “rise of the introverts.”

In the Introduction, Kahnweiler defines introversion and how it differs from shyness, as well as how it contrasts with extroversion. Strengths of introverts are also emphasized.

Chapter 1 outlines six key challenges for introverts: People Exhaustion, Fast Pace, Getting Interrupted, Pressure to Self-Promote, Emphasis on Teams, and Negative Impressions. Chapter 2 describes a framework called the 4 Ps process (Prepare, Presence, Push, and Practice) that can be used to address these challenges. Chapter 3 is an Introverted Leader Quiz.

The following chapters explain how to apply the 4 Ps to specific scenarios, including leading people and projects, delivering powerful presentations, leading and participating in meetings, networking, communicating and coaching for results, and managing up. At the end of each chapter is a figure illustrating the process for that goal. Peppered throughout are figures summarizing tools, techniques, and exercises that readers can use when applying the process to their own situations.

Chapter 10 highlights the positive results of using the 4 Ps process for readers and their organizations and warns of the possibility of overusing this process. The final chapter lays out a sample 4 Ps action plan, as well as space for readers to create their own.

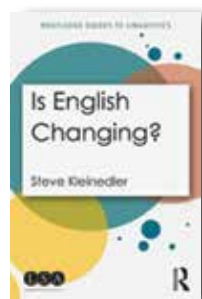
The second edition of *The Introverted Leader* provides simple tools and techniques that are easy to understand and apply to one’s specific leadership challenges. It is highly recommended to all introverts who wish to build on their strengths to improve their leadership skills.

### Jennifer Spanier

Jennifer Spanier has been a freelance book and database indexer since 2009 and is President Elect of the American Society for Indexing. Previously she has worked as a biologist and a public librarian and indexes in a wide variety of subject areas.

### Is English Changing?

Steve Kleinedler. 2018. New York, NY: Routledge. [ISBN 978-1-138-23466-6. 194 pages, including index. US\$29.95 (softcover).]



The language that we speak and write today had a starting point of before 1100 and has been labeled Old English. A transition to what linguists call Middle English that morphs into Modern English was slow and gradual.

Kleinedler's *Is English Changing?* is one in a Routledge series that are brief introductions to linguistics. The author addresses questions of the changes that are occurring in English. But the book is much more because Kleinedler examines English from the origins in sounds to the people who make rules, usage, and style. He presents the subjects in readable format that makes understanding language complexities clear. Kleinedler uses copious samples to illustrate each part of language beginning with sounds.

Starting with old English, he traces English's evolution as we know it. Following an introduction, list of figures, and acknowledgments, Chapter 1 introduces linguistics by comparing Old, Middle, and Modern English. The actual linguistic matter begins in Chapter 2 focusing on speech sounds (phonetics). Chapter 3 moves on to word structure, that joins with other word structures to form sentence structures (4). Once established, Kleinedler argues that the total structure is influenced by meaning (5) and modified by context (6). Chapter 7 introduces society and culture in the study of language, specifically regional variations that you will find when looking at the language. Kleinedler covers rules, usage, and style (8) and, finally in the conclusion (9), he summarizes the earlier chapters and points ahead with additional reading and future studies in linguistics. The book closes with references, a listing of societies and associations, and an index.

Kleinedler's *Is English Changing?* shows the student the various parts of language and how they change. Students will find value in this book if they want to review the various aspects of language.

For technical communicators, Chapter 8 on Rules, Usage, and Style can be the most important. But, to understand it fully, they need to have read through the other seven chapters because of the language fundamentals Kleinedler presents. Because of the rules that technical communicators follow (sometimes unwillingly), it is helpful for technical communicators to know the answer to the question posed by the title.

Kleinedler approaches rules differently. There are the usual three groups, but they are not what you would expect: Native rules used by native users of the language and not taught; dictated rules that classify language as good/bad, right/wrong; and guidelines for communicators that include style and other language elements that make it easier for the audience to understand the communication.

After all, Kleinedler's explanations of the language elements, the reason why English is changing is two-fold: Shifts in pronunciation as literacy rates increase (mainly during the Middle Ages) and advances in the ways people communicate (the language of smart phone texts).

So, the language elements to be studied by students and as background for technical communicators make *Is English Changing?* a solid value.

### Tom Warren

Tom Warren is an STC Fellow, Jay R. Gould Award for Excellence recipient, and professor emeritus of English (technical writing) at Oklahoma State University, where he established the BA, MA, and PhD technical writing programs. Past president of INTECOM, he served as guest professor at the University of Paderborn, Germany.

## Project Management for Humans: Helping People Get Things Done

Brett Harned. 2017. Brooklyn, NY: Rosenfeld Media. [ISBN 978-1-933820-51-4. 226 pages, including index. US\$39.00 (softcover).]



For those in the technical communication field who have been thrust into the project management role, Harned provides a solid introduction to project management (PM) that may help readers understand how they landed in that role while also providing sound advice on how to be successful. How

wonderful to find another technical communicator with a shared experience moving from designer to project manager. Although not stated explicitly, the qualities that Harned identifies for good PM in the first chapter are like the qualities good technical communicators possess with adaptability, flexibility, and expert communication chief among them.

Harned keeps the human part of PM front and center. This is best evidenced by advice readers will find throughout *Project Management for Humans: Helping People Get Things Done* about realistic expectations. For those struggling in a new PM role, he notes that it can “take a good nine months for a full-time PM to feel comfortable with the job” (p. 17). Chapter 9 is entirely devoted to setting expectations and Harned covers the stakeholder audience in terrific detail throughout the book. He also shares typical PM tasks and helps readers understand how to embrace the PM role. Too busy with PM work? At the end of each chapter, he includes a TL; DR (Too Long, Didn’t Read) summary if readers only have time to hit the highlights. Also, the book does not have to be read sequentially. If readers need to know about estimating work or managing scope, they can go directly to those chapters.

Harned notes in Chapter 2 that there is no perfect PM tool kit. He presents different methodologies that readers can apply through the lens of their own organizational cultures and experiences. Harned does not advocate a one size fits all approach carefully explaining the differences between the more traditional waterfall processes and the newer Agile processes. He emphasizes the importance of getting to know the team to be an effective project manager and reminds readers that talking to people is critical. Harned includes

excellent example questions that project managers should pose to their teams. Readers will also enjoy the engaging illustrations by Deb Aoki that bring the discussion points to life. Readers will not want to miss Harned’s “swoop and poop” (p. 72) discussion about decision management.

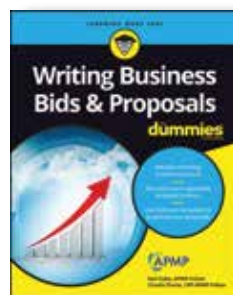
Harned provides advice on difficult conversations in Chapter 8. While the advice is good and the steps Harned asks readers to take are valid, newer project managers may want to enlist their supervisor or another more experienced project manager to help them handle difficult conversations. Harned advocates project managers asking questions about the project but misses explicitly stating that project managers should ask for help in their role if needed. Beyond that small detail, Harned provides a reliable introduction to project management.

### Liz Herman

Liz Herman, PhD, is a knowledge management practitioner and is certified in project management and technical communication. She is an STC senior member currently serves on its Education Advisory Panel. She works for Battelle in its Health and Consumer Solutions business unit.

## Writing Business Bids & Proposals for Dummies

Neil Cobb and Charlie Divine. 2016. Robbinsville, NJ: Wiley & Sons. [ISBN 978-1-119-17432-5. 418 pages, including index. US\$22.99 (softcover).]



Cobb and Divine, both certified as Association of Proposal Management Professionals (APMP), published *Writing Business Bids and Proposals for Dummies* in association with APMP. Readers may experience a subtle soft sell for APMP membership as they absorb the

book’s content, but membership is not required to access several helpful templates on the APMP.org website for those proposal writers without any beginning resources. The authors also provide access to a cheat sheet on the Dummies.com website that includes the book’s key takeaways. The Dummies.com website does not allow its audience to print the cheat sheet in a way that is easily reviewed. This is unfortunate given the time that Cobb and Divine spend discussing making proposals look good.



Cobb and Devine comprehensively cover critical elements to proposal writing. It is a kitchen sink approach to proposal management, but effective in the sense that there is takeaway content for both new and experienced proposal writers. Like many reference and resource books, the reader does not have to move through the book sequentially. Readers may want to start with Chapter 17, which details ten common misconceptions about bids and proposals. Readers can first disabuse themselves of these misconceptions and start fresh with Chapter 1.

The book's strengths include useful tips about repurposing documentation, effectively responding to customer questions, and an explanation about the necessary relationship that must exist between business developers and proposal writers if the size of the company warrants these two separate roles. The icons used to highlight a tip, a warning, or an example throughout the book are valuable. Readers who are skimming content can quickly look for these icons for important takeaways. Cobb and Divine also discuss the value of a proposal writer and how proposal writers can show their value to their companies.

Although Cobb and Divine do discuss ways to handle the stress of proposal writing, they minimize the pressure and tension that many proposal writers encounter in a deadline-driven, must-win environment. A franker, potentially lengthier discussion is needed. Experienced proposal writers may disagree with some of the writing examples that seem rather informal or casually written and put the company first before the customer despite the authors expressing the opposite. They also miss instructing proposal writers to explicitly follow guidelines found in the Request for Proposal (RFP) for font size and margins. Failing to follow the specifications could result in a disqualification. Cobb and Divine emphasize the importance of submitting a compliant proposal. It is missing, however, in the discussion of ensuring the proposal looks good. There are often rules about graphics as well.

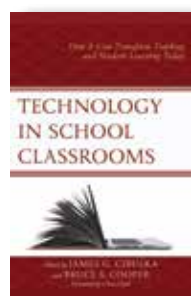
Readers will find Cobb and Divine's *Writing Business Bids and Proposals for Dummies* full of information that may not be easily compiled elsewhere. Because proposal writing and the submission of a winning proposal is critical to ensuring businesses thrive and survive, new proposal writers may want to have an experienced guide at their side and not rely on this book alone.

### Liz Herman

Liz Herman, PhD, is a knowledge management practitioner and is certified in project management and technical communication. She is an STC senior member currently serves on its Education Advisory Panel. She works for Battelle in its Health and Consumer Solutions business unit.

### Technology in School Classrooms: How It Can Transform Teaching and Student Learning Today

James G. Cibulka and Bruce S. Cooper, eds. 2017. Rowman & Littlefield. 172 pages. 978-1-4758-3104-7. USD\$30.00 (softcover).



Cibulka and Cooper are educators and editors for this collection of works about the use of technology in school classrooms and the general topic of next generation learning in schools. The topics covered in *Technology in School Classrooms* include use of online learning in K–12, the role of technology in student learning, how to approach the professional development of teachers in the digital age, use of technology in science classrooms, and the role of schools in educating and preparing a technologically literate teaching workforce.

In the piece on the state of K–12 online learning, I found some especially interesting observations. The history of using distance education in K–12 is long (p. 45). However, over the last three decades, we see no “convincing evidence” that online learning is “effective in producing positive student outcomes.” The authors do state that online and blended learning in this environment can be successful “but the way online and blended learning is currently implemented often does not work for all—or even most—students.” The authors go on to state that we should learn from programs that have not lived up to their high expectations.

Cibulka puts together a thought-provoking conclusion to *Technology in School Classrooms* with a section on reconciling the views of “technology skeptics and enthusiasts.” He states (p. 160) that there is “support for both views in these chapters.” Cibulka agrees with the idea that digital technology “has the potential to transform teaching and student learning.” He states that he agrees with the technology enthusiasts that the entire educational systems must be

transformed. Skeptics note that so far digital technology has not been a big driver of change in American education. So, there we get a glimpse of the arguments for and against the use of digital technologies in the school classroom.

Only time will tell if technology transforms education. Transforming the system might not be possible or easy as we need teacher training, leadership, and a vision to achieve the transformation. The skeptics will point out the challenges with the transformation. So, let's see what happens.

You might enjoy *Technology in School Classrooms* if you want to keep up with the topics and thinking in the field of next generation learning. If you are teaching, you might like your students to get exposed to the ideas here.

#### Jeanette Evans

Jeanette Evans holds an MS in technical communication management from Mercer University. She works with industry and academia groups doing technical writing and courseware development. Jeanette co-authors Intercom column on emerging technologies in education column. She recently won an APEX Award for Publication Excellence as NEO STC newsletter co-editor.

### Fighting Fake News!: Teaching Critical Thinking and Media Literacy in a Digital Age

Brian C. Housand, Ph.D. 2018. Waco, TX: Prufrock Press Inc. [ISBN 978-1-61821-728-8. 146 pages, including index. US\$29.95 (softcover).]



“Fake news” is one of the biggest news headlines in recent years. The threat of fake news is everywhere, and politicians have latched onto this buzzword. However, what exactly is fake news, and how do you determine the viability of your news source? With more people accessing news

from a variety of Internet sources, how can you tell what stories are legitimate, and which are yellow journalism or political propaganda? In *Fighting Fake News!*, Dr. Housand designs a program structured to teach students, and maybe even adults, how to determine which news stories are credible, and which are less than reliable.

America has a long history of fake news, from the yellow journalism that provoked the Spanish-American

war, to the misreporting that “The War of the Worlds” radio drama sparked mass hysteria. (It didn’t, but the newspapers said that there was hysteria to promote newspapers instead of the newcomer radio.) Why do people believe such stories? Often because they are predisposed and want to believe them. To combat such tendencies, Dr. Housand presents an attack plan. Fake news fighters must overcome the following challenges: information overload, certifying authenticity of sources, evaluating speed against accuracy, and overcoming your personal biases. This book is designed as a teaching aid, and educators can use activities placed within each chapter to engage students and help hone their critical thinking skills. Each chapter clearly lays out a plan of instruction to convey one of the main concepts, and to build up towards overcoming one of the stated challenges. For example, chapter 8 focuses on overcoming your biases. It describes how many people surround themselves on social media with people who share their political viewpoints. The result is, everyone in that circle agrees with everyone’s opinions, which falsely validates those opinions. Without alternate opinions, people develop a bias towards their group and are quick to dismiss other groups. To be better informed, Dr Housand suggests that alternative views be taken from qualified sources. The exercise for this chapter describes how to start a rudimentary debate by choosing a topic and then finding reliable sources that are pro/con/neutral before deciding.

Will *Fighting Fake News!* stop the spread of misinformation? Definitely not. But it does provide a logical framework to convey to students to help them develop critical thinking skills. Will it enable you to change your Facebook friend’s opposing political viewpoints? Probably not, but it can lead you into civil discourse on such topics. If you are interested in learning how media manipulates people and how to overcome said manipulation, then *Fighting Fake News!* is the book for you.

#### Timothy Esposito

Timothy Esposito is an STC Associate Fellow with over 15 years of technical communication experience. He is the past president of the STC Philadelphia Metro Chapter and chair of the Community Achievement Award Committee. Before becoming president, Timothy was chapter vice president, treasurer, webmaster, and scholarship manager.

## Confident Web Design: Master the Fundamentals of Website Creation and Supercharge Your Career

Kenny Wood. 2018. London, United Kingdom: Kogan Page. [ISBN 978-0-7494-8100-1. 257 pages, including index. US\$19.95 (softcover).]



Wood really takes the time to go into detail in this beginner's guide to creating websites and being confident in doing so. Every chapter is based on the various languages of Web design. He also goes over the key principles in which the World Wide Web functions. This book is great whether you have little to no knowledge on Web design.

*Confident Web Design* includes examples for each programming language mentioned. The last chapter is about putting everything into practice. As someone who has little practice with Web design, I could have used this book when I was creating a website. With creating my website, I had no idea what I was doing, and I just played around with various techniques until it worked. Reading this book has helped me interpret what making a website consists of and how to have a better designed one.

Websites require a lot of attention to detail and if something goes wrong it can make or break your website design. This book is great for beginners because it covers how to make your website and eliminates the room for error in coding.

### Heather Morgan

Heather Morgan is a corporate sales coordinator in Dallas, TX. She graduated from York College of Pennsylvania with a Hospitality Management degree. In her spare time, Heather enjoys traveling, petting every dog she can, and enjoying a good book.

## Editing in Word 2016

Adrienne Montgomerie. 2017. 2<sup>nd</sup> ed. Kingston, Canada: Right Angels and Polo Bears. [ISBN 978-17750457-0-0. 121 pages. US\$35.00 (eBook).]



In Montgomerie's own words, "This is no ordinary reference book. Neither is it simply a workbook or even an enhanced e-book; this is a self-study course. The video demos and exercises are an integral part of this book. The videos show how the tools work, and how to navigate the Word environment. The exercises

help you check your learning" (p. 2). Being an accomplished Word user, I frequently skipped the videos and found the text explanations and instructions perfectly informative and usable.

Instructions are handily prefaced with an Apple 🍏 or the Windows 🖥️ icon. Readers may want to plan on reading only the instructions that apply to their platform to prevent boredom or confusion.

Montgomerie sprinkles Pro Tips throughout the text and offers relevant best practices, such as *"Always give a document a onceover in Final or No Markup view before sending it to the client. This will reveal a bunch of formatting errors that arise from working with markup displayed. Double spaces between words, spaces around punctuation, or no spaces between words are common errors often obscured by the redlining on the screen"* (p. 13).

When explaining codes for finding or replacing special characters, Montgomerie does a good job. However, she could have improved the content (see Figure 30 on p. 47) by noting that the code letters (the 'p' in ^p, for instance) must be lower case and that 'l' in ^l is a lower-case L, not a numeral 1 or a capital I.

The information on Sections is very light and doesn't address the various types available, and when they are best used. They can be essential for working with complex documents and having the print come out the way you want it.

I found it annoying that Montgomerie includes references to the CopyEditing.com site where publications are available only to paid subscribers. It is likely that her target audience may already belong and will benefit from these references.

In the Macros section, I found it interesting that Montgomerie was speaking about playing and recording macros and referenced the "tape deck" buttons. She does

include a reference and link to macro-guru Paul Beverly's YouTube channel (which includes the macros' code).

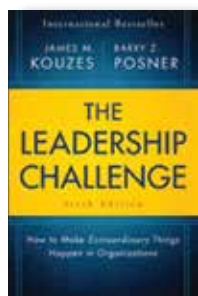
*Editing in Word 2016* is more than just a reference book; it is a self-study course for editors using Apple or Windows. Read the book, view the 24 demo videos, do the 24 exercises (and view the support website): be more efficient and effective by having Word do the "heavy lifting" for a change.

### Melissa K. Ruryk

Melissa K. Ruryk is an STC Senior Member with more than 30 years experience as an independent technical communicator in Vancouver, Canada. She holds a Bachelor's in English/Art. Melissa specializes in the areas of writing policy and procedures, user and training guides; facilitating online Word courses, writing effective résumés, and editing.

### The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations

James M. Kouzes and Barry Z. Posner. 2017. 6<sup>th</sup> ed. Hoboken, NJ: Wiley & Sons. [ISBN 978-1-119-27896-2. 416 pages, including index. US\$35.00.]



The very first example provided in Kouzes and Posner's *The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations* is about a credit card company. This may lead readers to put this book in with others on the topic of leadership and management as many follow the formula of using

credit card companies as prime examples. Keep reading. The authors move quickly into other examples. More importantly, the content is rich with easy-to-apply concepts and engaging graphics that foster synthesis of the material.

The Five Practices and Ten Commitments of Exemplary Leadership are illustrated toward the beginning of the book and serve as a guiding framework for the discussion that follows. From modeling the way to challenging the process to encouraging the heart, Kouzes and Posner push and pull the reader through not only the how-to, but the why behind different leadership principles. Their guidance is built upon over 100,000 people responding to a Characteristics of Admired Leaders (CAL) checklist. Perhaps not surprisingly, the top traits are honesty, competency,

inspirational, and forward-thinking. Beyond possessing these top traits, the authors share how to self-assess as a leader. For example, leaders are reminded to ask purposeful questions daily around the key principles of teamwork, respect, learning, continuous improvement, and customer focus. Kouzes and Posner provide the questions making immediate the applicability of this lesson and one that can be accomplished by leaders with varying levels of experience. In addition, each chapter ends with a Take Action summary that highlights the chapter's key takeaways and lists the five or six steps readers must take to master that concept whether it be fostering collaboration or recognizing contributions.

Many times throughout the book, the authors provide simple, yet effective, examples of ways to lead with stories pulled directly from the many case studies and interviews they have completed over this book's history, now currently in its 6<sup>th</sup> edition. For example, the authors share a story about how simply saying please and thank you completely changed a law firm's atmosphere for first-year associates. Rather than leaving within the first few months of employment because they didn't feel valued, these associates now desire to continue working for a firm that recognizes and validates their work. They are thanked for their efforts.

*The Leadership Challenge* is an informative book for those looking to grow into leadership positions, currently leading, and for those readers wanting to better understand leaders and leadership within their own organizations. Readers do not have to label themselves as leaders to reap the benefits of Kouzes and Posner's leadership primer. Leaders do not have to be leading mega-sized companies. This book fits all.

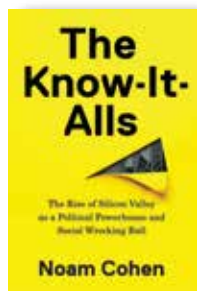
### Liz Herman

Liz Herman, PhD, is a knowledge management practitioner and is certified in project management and technical communication. She is an STC senior member currently serves on its Education Advisory Panel. She works for Battelle in its Health business unit.



## The Know-It-Alls: The Rise of Silicon Valley as a Political Powerhouse and Social Wrecking Ball

Noam Cohen. 2017. New York, NY: The New Press. [ISBN 978-1-62097-210-6. 260 pages, including index. US\$25.95.]



For several decades Silicon Valley has preached a gospel of disruption. If we just let technology visionaries have a free hand to move fast and break things, they will use their brilliance and benevolence to make the world a better place. So far, dazzled by the wonders of the digital age, we have largely let them have their way.

However, in the face of job losses, decimated industries, and an election influenced, and possibly decided, by fake news spread through social media, it is time to take a closer critical look at those who claim to benefit mankind while making themselves rich.

In *The-Know-It-Alls: The Rise of Silicon Valley as a Political Powerhouse and Social Wrecking Ball*, former New York Times technology columnist Noam Cohen traces how our present situation came about and provides a brilliant critique of the effects the Valley's radical libertarian mantra is having on our lives.

In a tale of academic ambition, hacker arrogance, and entrepreneurial greed, Cohen convincingly argues that the fact that the Web morphed from its original non-commercial and collaborative beginnings into an individualistic, centralized, commercial entity was not inevitable. Rather, it was largely due to specific decisions made by a relative handful of well-placed individuals at key points in its development.

Taken together, those individuals are a colorful lot: researchers, hackers, and entrepreneurs united by little but an interest in computers and an uber-confidence in their own brilliance. In a series of intellectual profiles, we get a fresh take not only on the usual suspects—Gates, Zuckerberg, Bezos, and the PayPal Mafia of venture capitalists—but also on earlier foundational figures. John McCarthy who ran the first Artificial Intelligence Labs, for example, did much to foster the hacker culture of anarchic resistance to authority and regulation of any kind, while IQ pioneer Lewis Terman and his son Frederick at Stanford University paved the way for Silicon Valley by pushing the university to become a launching pad for business start-ups.

Along the way, Cohen offers a scathing critique of the harsh, individualistic, market-centric, values pushed by Silicon Valley and the implications those values have for the rest of society and on our democratic ideals. We are asked to consider whether we really want a society where everyone is forced to become a “start-up of you,” where government regulations wither away, bold entrepreneurs amass billions of dollars from their innovations, and the rest of us struggle in a hypercompetitive market without unions, government regulations, or social welfare programs to protect us.

Well researched, fair, and brilliantly told, *The Know-It-Alls* offers a refreshing alternative to the hagiographic reporting that has characterized much of the coverage of the valley's know-it-alls. For those who wish to understand where we are, and who got us here, it is a must read.

### Patrick Lufkin

Patrick Lufkin is an STC Fellow with experience in computer documentation, newsletter production, and public relations. He reads widely in science, history, and current affairs, as well as on writing and editing. He chairs the Gordon Scholarship for technical communication and co-chairs the Northern California technical communication competition.

## Vanishing Perspective

Alexis Beauclair. 2018. Chicago, IL: 2dcloud. [ISBN 978-1-937541-30-9. 125 pages. US\$20.95 (softcover).]



*Vanishing Perspective* collects four previously self-published comics produced by the comic artist Alexis Beauclair. Different readers will interpret this book in different ways. Originally produced between the years 2013 and 2016, the comics present trimmed down narratives using simple line, flat planes, and composition. These narratives are stripped of all but the most basic context, and cover topics like prisms, motion, mazes, perspective, and even a tribute to Sol Le Witt. The four comics are presented to show a chronological progression in Beauclair's work. They are published along with an interview with Beauclair and a brief exploration of his work.

Springing from the world of alternative comics, Beauclair takes an experimental, minimalist approach to the medium. His self-professed primary goal is to distill the artform down to the basics of movement. He minimizes imagery and narrative to the point of near abstraction. With one or two exceptions, all figures are reduced to no more than a few lines. Narratives, where they are decipherable or intended, are stripped down to simple paths from point A to point B. It can be difficult to cull much meaning from the work without context. Fortunately, the interview and brief text on Beauclair's work provides some useful insight. Essentially, the comics operate as experiments in distillation, for example, more fine art than traditional graphic narrative. This creates a unique niche for lovers and researchers of the medium, but it is such a narrow focus that readers may struggle to find the proper point of entry into the work. Basic comic structures, such as reading left to right and top to bottom, combine with titles that serve as the guidelines which allow one to engage with the work.

It is difficult to describe the comics in words without presenting a sample, but this reviewer was struck by the work's resemblance to early digital imagery. In similarity to DOS simulators or fractal arcade machines from the 1980s, the work presents stripped corridors and seemingly endless mazes devoid of texture and detail. It is several levels more minimal than the commonly recognized comic forms of superheroes like Batman, and closer to the work of Schulz on Peanuts or Hergé on Tintin, which Beauclair cites as an influence (p. 117), but still extends further. There's no protagonist, no antagonist, no narrative outside of mechanical journeys along a track. Beauclair wants the reader to interact with the work at their own level, with no hand holding. The experience is all part of an experiment.

Once one accepts the fact that they are not in the standard comic setup, one can start enjoying the pathways that Beauclair is presenting. It is certainly a unique take on the medium and explores frontiers that have been little traveled in the past.

### Sam Washburn

Sam Washburn has been an image maker since 2009 and received his MFA from the University of Central Oklahoma College of Fine Arts and Design in 2018. His work has been recognized by American Illustration, 3x3 and others. He also teaches illustration and design in Oklahoma.

### Interaction Design: From Concept to Creation

Jamie Steane and Joyce Yee. 2018. London, UK: Bloomsbury Visual Arts. [ISBN: 978-1-4742-3239-5. pages, including index. US\$39.38 (softcover).]



Throughout my career, I've primarily focused on technical writing, training, and instructional design. I looked forward to reading *Interaction Design: From Concept to Creation* to see how other designers went from A-to-Z in their project design.

The book is set up in six chapters, each showcasing real-life projects focused heavily on application creation, which doesn't necessarily apply to me...yet! But the mobility piece of the production continues to gain traction in eLearning/training and is becoming more and more popular as apps take over normal daily routines. Many production steps may not match exactly what I do in creation for my projects, but the unique teams' processes when coming up with the final function and design was eye-opening.

Design aspects, like matching the cartoon's design to the gaming app, was a no-brainer. But in the case of an app being developed for travelers, the idea of creating profiles for each of the main users they anticipated was intriguing. My current audience is a very specific genre (normally), but to watch an app get developed for much broader audiences really gave me ideas on how to better approach the audience I appeal to daily.

Another insight I appreciated peeked into multiple client relationships. When I opened my own company years ago, I often wondered if the limitations and challenges I experienced were normal. As a lone writer and developer, the feeling of living on an island comes in waves, pun intended! But here I see the issues as they get worked out and the talented ways each of the teams overcame the complexities they faced. It was empowering to read through the beginning ideas to the final product, with all the bumps and successes in between.

The Experiences chapter was by far my favorite, where the team gets to troubleshoot real people visiting an aquarium and figuring out how to make their experiences not only better, but more engaging, up to date, and easier to navigate. Multiple solutions were needed to meet the client's requests, and in the end not all of them could be created in the desired timeline, but the final products were, in my opinion, plain awesome!

As you reach the rebranding chapter, I can't help but be reminded of the rebranding I've seen from so many companies over the years. Not just the logos or color schemes are being changed anymore! Keeping a fresh platform is part of survival because of how quickly technology changes, and the importance of real-time responses and online consumer reviews.

I enjoyed the consistency of the book's design, because in each of the projects you learn almost the same components from each example. You walk through the development in front, looking at the challenges, the outcome, the insight, and even the project facts. Then, you look deeper into the development for the context and user research. They even line out the project stages, down to the details of which tools were used.

Each chapter ends with an interview with the team, and then finally a workshop that guides you through an exercise to practice what you've learned so far. The detail that goes into each of the steps makes you feel like you're working alongside a team, even if you're not.

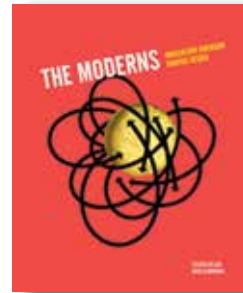
It's clear to see that the agile and waterfall methods are still very much being used today in development. But as the authors stated, a lot of these teams implemented a hybrid of both agile and waterfall, which they coined a "wagile" method. And no worries, all those years learning scrum were not in vain. The method can be different for every race!

#### Kristin Kirkham-Broadhead

Kristin Kirkham-Broadhead is an instructional designer, technical writer, and training & development manager from Dallas, TX. She previously served the STC North Texas Lone Star Community as President from 2009–2010. When she is not writing, she loves scrapbooking, photography, and chasing her son around the house.

#### The Moderns: Midcentury American Graphic Design

Steven Heller and Greg D'Onofrio. 2017. New York, NY: Harry N. Abrams. [ISBN 978-1-4197-2401-5. 336 pages, including index. US\$55.00.]



*The Moderns: Midcentury American Graphic Design* by Steven Heller and Greg D'Onofrio is an excellent attempt to broach history of graphic design beyond the existing canon. The content for the text is broken up into four sections: Introduction, Émigrés, Homegrown, and it concludes with an essay from 1938 titled "The Bauhaus Tradition and New Typography" by L. Sandusky, which provides an early view of these movements from an American perspective. In the introduction, the authors include a description of the modernist movement in America and discuss the selection as well as the breakdown of the designers included in the text, who they chose to include, who was left out, and the reasons why. They also address the need to expand the canon of design history.

Of the 63 (really 66, three are presented as duos) featured designers, each is presented with a one-page biography and two- or three-page spreads of examples of their work. Where *The Moderns* really excels is on the focus of the content; the information for the biographies and images used are very specific to the modern movement in America. While the book acknowledges that the designers who immigrated to America have a past in design before their arrival, and that some of the American designers may also have had European influence, the emphasis is on their influence and within the American Borders. This means that for designers such as Josef Albers and Herbert Bayer, who are widely recognized within the canon for their contributions to European Avant Garde, are here being recognized largely for their contributions to American design.

Evidence also exists of an attempt to include women and minorities in this history. The largely missing history of women and minorities in a Eurocentric history of graphic design is something that has been noted by scholars of design history. The inclusion of female designers such as Lillian Bassman and Jacqueline Casey, as well as African American designers Donald Crews and Georg Olden, adds to the scope of this work.

*The Moderns* does not solve this issue, but it stands as a model of inclusion for future histories.

So, while there is still a long way to go in the interest of expanding the canon of graphic design history, *The Moderns* is taking a big leap forward in the right direction. Besides the collection of images that wonderfully illustrate the modern movement in America the text also contains a wealth of great quotes from great designers. While most designers will be familiar with the words of Ludwig Mies van der Rohe, “Less is more”, are no less wise than the words of Louis Danziger “If you want to look as good as Rand, don’t look at Rand; look at what Rand looks at.” For those who have read the epic tome, Meggs’ *History of Graphic Design*, this is an opportunity to dig into some of history’s great designers who are mentioned only in passing, as well as to examine designers whose names are not mentioned at all. *The Moderns* is an excellent supplement to any survey text of the history of graphic design.

#### Amanda Horton

Amanda Horton holds an MFA in Design and currently teaches graduate and undergraduate courses at the University of Central Oklahoma in the areas of design technology, design studio, and history of graphic design. Ms. Horton is also the director of the Design History Minor at UCO.

#### Gender in Communication: A Critical Introduction

Catherine Helen Palczewski, Victoria Pruin DeFrancisco, and Danielle Dick McGeough. 2019. 3<sup>rd</sup> ed. Thousand Oaks, CA: SAGE Publications. [ISBN 978-1-5063-5845-1. 324 pages, including index. \$105.00 (softcover).]



*Gender in Communication: A Critical Introduction* is an eye-opener: It makes us aware of so many elements of language we have seldom if ever considered. And this, for people who have spent their careers working with the English language. Those elements, as the book’s title indicates, revolve around

the topics of sex and gender in all communication forms: spoken, written, and all media types.

The book views things from a decidedly feminist perspective: identifying those features of language—words and visuals—that contain an arbitrary gender bias. This includes words that have become so much a

part of the language, we don’t even “think” of them as “gendered,” as the text says. For example, a word like “forefathers.” Who would even “consider” such a word sexist? Yet once you dig deeper, the implications become clearer. The alternative, though, “does” sound a bit odd: “foremothers.”

In technical writing and the journalistic formats of writing, it’s important to be aware of words and phrases that might be considered sexist.

These things can be “very” subtle and elusive. They pop up in humor, swearing, politeness forms (connotations of Mr. versus Ms.; Master and Mistress), as well as what the authors call feminine versus masculine conversation style (women’s being more “relationship-oriented;” men’s more “task-oriented” (p. 65).

One scholar calls the change that is occurring “the patriarchal universe of discourse” (p. 107). Still, with women’s emancipation and the growing strength of the women’s movement, the language is changing. Major periodicals like the *Washington Post* and the *Chicago Manual of Style* have accepted the use of “they” for he/she or he or she. One study found that most people use “they” while referring to a person when the gender is unknown (p. 101).

One humble suggestion: *Gender in Communication* deals with sensitive emotional issues that affect people deeply and intimately. Unfortunately, it is laden with what I’ve called elsewhere “social science style:” a style of writing, very common in sociology, psychology, and anthropology, that presents often delicate material in a cold impersonal way. The result is: it can wring the life out of real-world flesh-and-blood events; make a concept harder to understand; and be a real turn-off for others.

No space here for lots examples. But these two should suffice:

“For women to name and describe their experiences in “their own terms” is a crucial scientific and “epistemological act.” Members of marginalized groups must *struggle* to name their own experiences for themselves in order to claim the subjectivity, the possibility of historical agency, that is given to members of dominant groups at birth” (p. 116).

“**Resignification** refers to the linguistic practice in which you reject a term’s existing meaning’s normative power...Instead of unreflexively using language, you would “seek to recite language oppositionally, so that hegemonic terms take on alternative, counter-hegemonic meanings” (p. 117).



**Steven Darian**

Steven Darian is an STC Fellow and retired from a career at Rutgers University, where he taught business and technical writing as well as other language-related courses. He is finishing the 2<sup>nd</sup> edition of his book, "Technique in Nonfiction: The Tools of the Trade", due out the end of 2018.

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A dark blue silhouette of a jagged mountain range spans the bottom half of the image. The peaks are sharp and angular, with some smaller peaks and valleys. The background is a vibrant blue with a sunburst effect emanating from the top right corner, creating a sense of energy and brightness.

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Lyn Gattis, Editor

The following articles on technical communication have appeared recently in other journals. The abstracts are prepared by volunteer journal monitors. If you would like to contribute, contact Lyn Gattis at [LynGattis@MissouriState.edu](mailto:LynGattis@MissouriState.edu).

"Recent & Relevant" does not supply copies of cited articles. However, most publishers supply reprints, tear sheets, or copies at nominal cost. Lists of publishers' addresses, covering nearly all the articles we have cited, appear in *Ulrich's international periodicals directory*.

## Communication

### ***Empathy by dominant versus minority group members in intergroup interaction: Do dominant group members always come out on top?***

Vorauer, J. D., & Quesnel, M. S. (2018). *Group Processes & Intergroup Relations*, 21(4), 549–567. [doi: none]

"What power dynamics are instantiated when a minority group member empathizes with a dominant group member during social interaction? How do these dynamics compare to those instantiated when the dominant group member instead does the empathizing? According to a *general power script* account, because empathy is generally directed 'down' toward disadvantaged targets needing support, the empathizer should come out 'on top' with respect to power-relevant outcomes no matter who it is. According to a *meta-stereotype* account, because adopting an empathic stance in intergroup contexts leads individuals to think about how their own group is viewed (including with respect to power-relevant characteristics), the dominant group member might come out on top no matter which person empathizes. Two studies involving face-to-face intergroup exchanges yielded results that overall were consistent with the meta-stereotype account: Regardless of who does it, empathy in intergroup contexts seems more apt to exacerbate than mitigate group-based status differences."

**Yvonne Wade Sanchez**

### ***Evaluation markers and mitigators in analyst reports in light of market response to stock recommendations***

Klimczak, K., & Dynel, M. (2018). *International Journal of Business Communication*, 55(3), 310–337. doi: 10.1177/2329488417738082

"Professionals and individuals who invest in equity markets rely on financial analysts' recommendations and reports to decide on what to invest in and when to trade. This study examines the role of two groups of communication strategies, evaluation markers and mitigators, in establishing analysts' credibility. The sample consists of 80 reports written in Polish for companies listed on the Warsaw Stock Exchange in Poland. In this emerging market setting, where credibility is challenged by uncertainty, analysts deploy various strategies depending on the recommendation they make: 'buy,' 'hold,' or 'sell' shares. The findings point toward a specific group of mitigators, namely subjectivization, as a means of communicating expert opinion. Regression results reveal that investors' reaction to the publication of a recommendation to 'hold' or 'sell' shares, measured based on the changes in share prices, is stronger when subjectivization is used in a report. The findings carry implications for research into analyst behavior and for the development of professional writing skills."

**Katherine Wertz**

### **Formulations in delicate actions: A study of analyst questions in earnings conference calls**

de Oliveira, M. L., & Pereira, S. M. R. (2018). *International Journal of Business Communication*, 55(3), 293–309. doi: 10.1177/2329488417712012

“Many of the studies on Earnings Conference Calls have focused on the executive’s discourse. In this article, [the authors] focus on the analysts’ discourse, specifically how they handle delicate actions, such as formulating questions about a company’s negative performance points. Considering that analysts’ questions commonly present more than one version for a request, this study investigates the interactional function and linguistic differences realized in formulations used to identify or describe what analysts actually want to know. The methodological approach compares different formulations produced by the same analyst and by another analyst going back to a previously formulated question. Findings showed that request formulations gain strength when a speaker goes back to a question. Additionally, they showed that, in any case, variations in the degree of generality/specificity of each version of a question play a major role in managing the analyst’s interactive goal, namely gaining information without compromising the relationship with the company.”

Katherine Wertz

### **The influence of textual cues on first impressions of an email sender**

Marlow, S. L., Lacerenza, C. N., & Iwig, C. (2018). *Business and Professional Communication Quarterly*, 81(2), 149–166. doi: 10.1177/2329490617723115

In this study, the researchers compared first impressions of emails given by the devices used and the closing of the messages. They also gave advice for female senders and for male senders, based on their findings. “The present study experimentally manipulated the gender of an email sender, closing salutation, and sending mode (i.e., email sent via desktop computer/laptop as compared with email sent via a mobile device) to determine if these specific cues influence first impressions of the sender’s competence, professionalism, positive affect, and negative affect. Although no effect of sending mode

was found, closing salutation influenced perceptions; females were viewed as less professional when using ‘Thanks!’ as opposed to using ‘Best,’ ‘Thank you,’ or no salutation. However, in general, females were viewed as more professional than males, and ‘Thanks!’ elicited perceptions of positive affect.”

Diana Fox Bentele

### **Media bias and the role of user generated contents in crisis management: A case-study about the communication of the Hungarian police forces after 2016 Budapest explosion**

Pintér, D. G. (2018). *Corvinus Journal of Sociology and Social Policy*, 9(1), 101–125. doi: 10.14267/CJSSP.2018.1.05

“The 2016 Budapest explosion occurred on September 24, 2016, when a young man detonated a nail bomb in an attempt to kill two patrolling police officers. This case-study analyses the official communication of the Hungarian police force, focusing on the time that elapsed until their first official reaction. [The author argues] that the first twenty-four hours after the explosion were the most crucial, and that working with speed and efficiency is important. [The author claims] that a successful crisis management process takes not only the bias of mass media into consideration, but also the influence of internet-user-generated content and conspiracy theories as well. The publication of a holding statement, designed to help control the message the public will hear immediately following an incident, is also essential.”

Yvonne Wade Sanchez

## **Editing**

### **The changing face of the medical/technical editor**

Palmer, L., & Lang, S. (2018). *AMWA Journal*, 33(1), 38–40. [doi: none]

Lang and Palmer propose expanding the definition and role of the editor in a rapidly changing publication landscape. Beyond traditional skills, new requirements

include familiarity with electronic platforms, the media requirements of various audiences, and the rhetorical requirements of these audiences (for example, those primarily using social media).

Magdalena Berry

## Education

### ***Bridging the gap between food pantries and the kitchen table: Teaching embodied literacy in the technical communication classroom***

Swacha, K. (2018). *Technical Communication Quarterly*, 27(3), 261–282. doi: 10.1080/10572252.2018.1476589

“Drawing from literature on communication as a physical, material experience, this article expands Cargile Cook’s ‘layered literacies’ (2002) pedagogical framework to include a seventh literacy—embodied literacy. The article uses a classroom case study in which students coproduced a cookbook with low-income, elderly, disabled users, to demonstrate how students can become more responsible and effective technical communicators by recognizing users’ divergent embodied experiences. The article includes suggestions for concrete classroom practices that encourage such embodied literacy.”

Rhonda Stanton

### ***Hidden in plain sight: Findings from a survey on the multi-major professional writing course***

Read, S., & Michaud, M. (2018). *Technical Communication Quarterly*, 27(3), 227–248. doi: 10.1080/10572252.2018.1479590

“In this article, the authors report on findings from a survey of writing instructors who teach the multi-major professional writing course (MMPW) across diverse institutional contexts. The authors marshal these findings to advance a series of arguments about the situation of the MMPW course in U.S. higher education.”

Rhonda Stanton

### ***International Organizational Communication Assessment (IOCA): Message analysis and effectiveness for a global age***

Aust, P. J., & Allison, A. W. (2017). *Connexions / International Professional Communication Journal*, 5(2), 1–31. [doi: none]

“Advances in technology, the Internet, and ease of mobility have increased modern organizations’ global outreach and made it easier for companies to establish offices in other nations; however, with these benefits have come the challenge of working with overseas clients, dealing with language barriers, and navigating different cultural expectations. Organizational communication analyzes and addresses these challenges as it relates to message exchange. Organizational communication involves the creation, exchange, and movement of messages in an organizational context for a common goal. The purpose of this teaching case study is to review a graduate-level course (COM 7900: The Integrated Global Communication Capstone at Kennesaw State University) that focuses on an organizational assessment tool designed to examine today’s global organization. This tool is termed the International Organizational Communication Assessment (IOCA). This study explains the IOCA, highlights its pedagogical approach to experiential learning, and critiques the IOCA based on the course’s learning objectives.”

Lyn Gattis

### ***Revisioning exploratory discourse as a rhetorical frame for social media practice in business and professional communication***

Walwema, J. (2017). *Connexions / International Professional Communication Journal*, 5(2), 1–25. [doi: none]

“Several studies have examined the role of emerging technologies and their pedagogical implications in business and professional communication. This paper elaborates on those studies by examining the task of teaching social media as an emerging form of business and professional communication. Supported by James Kinneavy’s exploratory discourse, a form of reasoning that attempts to resolve issues that cannot be resolved by formal logic, the paper reports on a teaching case

that employs students as interlocutors to explore social media in workplace communication through dialectic, competing interpretations of texts, and probable knowledge. This paper seeks to develop exploratory discourse as a signature pedagogy for enculturating students in the profession.”

Lyn Gattis

### **Student philanthropy: Experiencing grant proposals from the funder's perspective**

Bloch, J. (2018). *Business and Professional Communication Quarterly*, 81(2), 167–184. doi: 10.1177/2329490617752576

This article may be helpful for teachers of service-learning courses, but, in general, it is about writing with a focus on audience. The author reversed the roles of her students by making them the decision makers of applications. “Student philanthropy projects empower students to become grant givers. Through learning by giving, students get hands-on practice making decisions with real monetary impact. This article explains the steps in a student philanthropy project in a grant-writing course, illustrating how business and professional communication courses can be a natural partner for this approach. Results of a qualitative survey show how student philanthropy enhances learning by turning the tables, enabling learners to become decision makers with the important responsibility of writing, evaluating, and responding to communication in ways that will have positive effects on nonprofits in their community.”

Diana Fox Bentele

## **Ethics**

### **Critical animal and media studies: Expanding the understanding of oppression in communication research**

Almiron, N., Cole, M., & Freeman, C. P. (2018). *European Journal of Communication*, 33(4), 367–380. doi: 0267323118763937

“Critical and communication studies have traditionally neglected the oppression conducted by humans towards other animals.... The goal of this article is to

remedy this neglect by introducing the subdiscipline of Critical Animal and Media Studies. Critical Animal and Media Studies takes inspiration both from critical animal studies—which is so far the most consolidated critical field of research in the social sciences addressing our exploitation of other animals—and from the normative-moral stance rooted in the cornerstones of traditional critical media studies. The authors argue that the Critical Animal and Media Studies approach is an unavoidable step forward for critical media and communication studies to engage with the expanded circle of concerns of contemporary ethical thinking.”

Yvonne Wade Sanchez

### **Evolving concepts of risk: Justifying safety communication in a high-hazard, intercultural industry**

Patriarca, A. (2017). *Connexions / International Professional Communication Journal*, 5(2), 1–32. [doi: none]

“The Occupational Safety and Health Administration’s (OSHA’s) Susan Harwood Training Grant program produces safety training aimed at workers in many industries, but the construction industry is an area of focus for the program due to the high risk of injury or death for its workers. This risk is significantly higher for Hispanic or Latinx construction workers, making effective safety training for these workers even more important. This article analyzes the effectiveness of the strategies used to justify this training: many of the strategies suggest a desire to frighten workers into safe behavior, rather than an understanding of what will encourage them to pay attention. These ineffective strategies include fatal accident statistics from construction jobsites, images of dead or dying workers, and newspaper articles about unusual fatal accidents on jobsites. More effective strategies include focusing on more common situations, such as non-fatal accidents that can prevent the worker from going to work, or on a judicious use of appropriate humor. The article also recommends ways in which technical communicators can contribute to discussions of risk communication within this and other programs.”

Lyn Gattis



### **Using technical writing strategies to create Islamic Pakistani subjects: A case study of textbooks in Pakistan**

Shah, S. F. A., Jan, F., & Karikari, E. (2017). *Connexions / International Professional Communication Journal*, 5(2), 1–28. [doi: none]

“In response to the call by Agboka (2013) for the need to take up more international technical communication projects that have a social justice goal, this paper engages some of the complex processes of globalization and cultural identity through the analysis of ‘Pakistan Studies’ textbooks used in grade 9 and 10 in some Pakistani schools. This paper is based on the fundamental assumption that the textbook, as an essential component of formal education, cannot be disassociated from the political, social, economic, and even religious realities of modern life. [The authors] argue that textbooks are technical writing projects that operate from scientific and technologized forms whose legitimization results in the subordination of alternative knowledge. An analysis of the data through Critical Discourse Analysis (CDA) reveals that these textbooks reinforce subjectivities through a project that privileges certain forms of cultural identification.”

Lyn Gattis

## **Health communication**

### **An examination of Microsoft® Word™ features used by medical writers**

Valenzuela, R., & Benau, D. (2018). *AMWA Journal* 33(2), 58–62. [doi: none]

“Training for medical writers generally includes an overview of features in word processing, spreadsheet, and presentation software, but information on which features and practices are most useful to medical writers is sparse. Data regarding Microsoft® (MS) Word™ features most regularly used by medical writers were collected by using an online survey consisting of 30 questions. The anonymous survey was distributed to medical writers both online (identified primarily through LinkedIn®) and in person at the American Medical Writers Association’s 2015 Annual Conference. The survey secondarily explored additional tools:

Excel™ features, other software, hardware, and best practices. This report focuses only on the MS Word™ results, with some highlights regarding computer monitor use. To assess differences according to years of experience and type of medical writer—regulatory or nonregulatory—the responses of these subgroups were compared for select survey questions. A total of 88 survey responses were recorded over about 1 month of active solicitation. The results showed that keyboard shortcuts, Find and Replace, split screen, AutoCorrect options, and customized ribbons were the most regularly used MS Word™ features. Additional tools cited as essential for the profession included review tools, Styles, Insert:Captions/Cross-references, formatting tools, and Table of Contents features. Seasoned writers were more likely to employ Find and Replace techniques, while newer writers appeared to use split screen more. Regulatory writers were more likely to use Insert:Captions, Insert:Cross-references, and formatting functions, while nonregulatory writers were more likely to use Insert:Footnote, Insert:Endnote, and bibliographic features in Word.”

Magdalena Berry

## **Information management**

### **Functional complexity and web site design: Evaluating the online presence of UNESCO world heritage sites**

De Jong, M., & Wu, Y. (2018). *Journal of Business and Technical Communication*, 32(3), 347–372. doi: 10.1177/1050651918762029

“Functional complexity is a widespread and underresearched phenomenon in Web sites. This article explores a specific case of functional complexity by analyzing the content of UNESCO World Heritage Web sites, which have to meet demands from both World Heritage and tourism perspectives. Based on a functional analysis, a content checklist was developed and used to evaluate a sample of 30 World Heritage Web sites. The results show that World Heritage Web sites generally fall short in all content categories. A cluster analysis reveals three types of World Heritage Web sites based on their emphasis on World Heritage content versus tourism content: (a) less well-developed Web sites (no emphasis),

(b) Web sites of World Heritage Sites with touristic possibilities (emphasis on World Heritage), and (c) Web sites of touristic attractions with outstanding cultural or natural value (emphasis on tourism). In all, the findings show that functional complexity poses serious threats to the exhaustiveness of a Web site's information and that evaluation approaches based on functional analysis can be useful in detecting blindspots in the content provided."

Sean Herring

### **Work motivation in the rhetoric of component content management**

Batova, T. (2018). *Journal of Business and Technical Communication*, 32(3), 308–346. doi: 10.1177/1050651918762030

In this study, strategies for teaching technical and professional writing are noted. "This article describes a 12-month qualitative study that analyzes how a company's transition to component content management (CCM)—a set of methodologies, processes, and technologies that allows working with texts as small components rather than complete, static documents—influences the work motivation of its technical communicators. The analysis is based on actor-network theory and the theories of work motivation from economics. When technical communicators felt that CCM's only focus was efficiency and savings and that they were not recognized and connected to the fruits of their labor, their motivation decreased. But their motivation increased when they were engaged in job crafting—reshaping their understanding of the fruits of their labor and gaining recognition through prosocial behavior."

Sean Herring

## **Intercultural issues**

### **The power of digital storytelling to communicate complex stem information across cultures**

Hill, S. (2017). *Connexions / International Professional Communication Journal*, 5(2), 1–38. [doi: none]

"The growing internationality of science and technology suggests the need to teach STEM students to communicate successfully across intercultural environments. This article argues that digital storytelling, which combines visuals and narrative to convey a message through story, can be a useful tool to do that. That health and other industries have already adopted this communication tool is further evidence of its potential for usefulness to STEM professional writing students. After defining digital storytelling, this article presents an analysis of the value of narrative (story) in professional communication and also specifically in communicating the complex information of STEM. It also examines the role of narrative in intercultural communication, connecting the multimodal form of digital storytelling to the multifaceted construct that is 'culture.' This article further analyzes visual communication and the role visuals play in successful digital storytelling. Finally, the article provides two examples of the use of digital storytelling in the classroom."

Lyn Gattis

### **Strategies for managing cultural conflict: Models review and their applications in business and technical communication**

Wang, J. (2018). *Journal of Technical Writing and Communication*, 48(3), 281–294. doi: 10.1177/0047281617696985

"[T]he limited study on dealing with cultural conflicts, along with the current political context in the United States, calls for efforts to systematically address diversity issues and cultural conflict in... research and teaching practices. One obstacle to advance effective communication strategies on cultural conflict in business and technical communication is the lack of communication with other disciplines. Through an interdisciplinary perspective, the... article introduces

the concept of cultural conflict, examines strategy models to address cultural conflict in different fields, and provides an example on how to identify a strategy model to resolve cultural conflict in business and technical communication practices....”

Anita Ford

## Language

### ***The epistemic status of predictions in Central Bank reports: A cross-linguistic study***

Lejeune, P. (2018). *International Journal of Business Communication*, 55(3), 357–382. doi: 10.1177/2329488418768691

“This study aims to analyze the strategies of hedging in a prototypical speech act in economic communication—that is, predictions. The analyzed genre is that of central bank projections. [The authors] have used a parallel corpus of four reports (one European Central Bank report and three national bank reports) written in English, French, Spanish, and Portuguese. The analyzed documents are multimodal (having text, tables, and charts). At a global level, hedging arises from external assumptions that limit the validity of the predictions and from the fact that generally the text does not give direct predictions but rather reports projections without assuming or attributing explicit responsibility regarding their validity. At the microlinguistic level, the epistemic marking of predications about the future is extremely complex, due to the phenomenon of grammatical metaphor. The cross-language analysis shows that because of language idiosyncrasies, the degree of endorsement of the typical utterances about prediction/projection varies between the reports.”

Katherine Wertz

### ***Financial innovation and institutional voices in the Canadian press: A look at the roaring 2000s***

Boulanger, P., & Gagnon, C. (2018). *International Journal of Business Communication*, 55(3), 383–405. doi: 10.1177/2329488417747596

“This corpus-assisted analysis examines seven Canadian newspapers from 2001 to 2008 in English and in French. It focuses on the speech that journalists reported when covering new financial instruments, namely collateralized debt obligations, credit default swaps, and asset-backed commercial paper. Eight years of news were surveyed with a concordancer and the data were analyzed using critical discourse analysis. The data show a wider range of voices in the English subcorpus when compared with the French. In both subcorpora, however, journalistic attitude was neutral and critical voices were deselected, while institutional voices such as those of banks were foregrounded. If polyphony is understood as the inclusion of an array of voices from the community, [this] study shows that the press was monophonic. Concurrently, [the authors’] investigation of the Canadian press reveals that financial innovations were not covered until 2007, when credit derivatives started to falter.”

Katherine Wertz

### ***Persuasion in earnings calls: A diachronic pragmalinguistic analysis***

Camiciottoli, B. (2018). *International Journal of Business Communication*, 55(3), 275–292. doi: 10.1177/2329488417735644

“This study investigates persuasive language in earnings calls. These are routine events organized by companies to report their quarterly financial results. The analysis is based on the earnings calls of 10 companies in the third quarter of 2009, when financial markets were still suffering from the global financial crisis, and the third quarter of 2013 when markets had largely recovered. Earnings call transcripts were compiled in two parallel corpora (Crisis Corpus and Recovery Corpus), thus providing a diachronic perspective. Semantic annotation software was used to extract pragmalinguistic resources of persuasion. The Crisis Corpus had a higher frequency of persuasive items, as executives often emphasized progress and future hopes. However, the types of items were largely the same

across the corpora. This suggests a well-consolidated linguistic protocol within this discourse community that transcends financial performance. The findings offer insights into how earnings call participants use persuasive language strategically to achieve their distinct professional objectives as responsible providers of information (executives) versus discerning seekers of information (analysts)."

Katherine Wertz

### ***The use of English-language business and finance terms in European languages***

Anglemark, L., & John, A. (2018). *International Journal of Business Communication*, 55(3), 406–440. <https://doi.org/10.1177/2329488418768698>

"Although it is generally accepted that English is becoming the lingua franca of international business, the details of this process are not well understood. This article uses the Google Books corpus to provide both a quantitative and a qualitative investigation of the ways in which specific English business terms are penetrating major European languages. Some English business terms now appear to be firmly established in other languages, and can be classified as lexical borrowings, while the use of other terms is better described as code-switching."

Katherine Wertz

## Management

### ***Managing illegitimate task requests through explanation and acknowledgment: A discursive leadership approach***

Minei, E. M., Eatough, E. M., & Cohen-Charash, Y. (2018). *Management Communication Quarterly*, 32(3), 374–397. doi: 10.1177/0893318918755506

This article may be particularly helpful for project managers who need to positively frame a request of a team member to do something outside the typical scope of duties or for self-employed professional writers who too often experience the mission creep of these requests.

The demoting illegitimate request is familiar, but the authors point out that some illegitimate requests can be promoting (higher stature than the typical role). "This study explored how discursive framing can mitigate an illegitimate task request—a request from a supervisor that extends beyond the appropriate parameters of the role. Using hypothetical vignettes in an experimental design, [the authors] examined how including an acknowledgment and/or explanation when making an illegitimate task request mitigated perceptions of illegitimacy and anger. Results indicate that acknowledgments mitigated perceptions of illegitimacy whereas explanations mitigated anger. Furthermore, the combination of acknowledgments and explanations had the strongest effects on reducing perceived illegitimacy and anger. [The authors] conclude with practical recommendations."

Diana Fox Bentele

## Research

### ***Artifactual dimensions of visual rhetoric: What a content analysis of 114 peer-reviewed articles reveals about data collection reporting***

King, A. S., & McCarthy, M. J. (2018). *Technical Communication Quarterly*, 27(3), 249–260. doi: 10.1080/10572252.2018.1479587

"This content analysis examined how the authors of 114 peer-reviewed journal articles explained their empirical approaches to visual rhetoric scholarship. The authors' content analysis sought to answer the question: how do scholars engage with the material dimensions of visual culture, specifically in terms of artifact selection and reporting data collection procedures? The answers to this question, the authors argue, are needed urgently as visual rhetoric research continues to expand because inconsistent reporting will hinder replicability and the reader's access to the author's argument. The authors use the findings of their content analysis to surface the implicit norms of empirical visual rhetoric research and to develop recommendations for reporting visual data collection procedures."

Rhonda Stanton



### ***Feminist historiography as methodology: The absence of international perspectives***

Petersen, E. J. (2017). *Connexions / International Professional Communication Journal*, 5(2), 1–38. [doi: none]

“The recurring methodology of feminist historiography in technical and professional communication (TPC) documents women’s contributions to TPC. This article, based on qualitative content analysis with scant quantitative analysis, highlights what is missing in that body of feminist historiography research: an international perspective, especially from varied viewpoints and contexts. Feminist historiography in TPC has ignored women of color and women of the Global South. TPC has fully embraced white, middle-class feminism from a historical perspective, leaving behind more inclusive, nuanced, and fair understandings and depictions of global women historically. Proposed solutions include expanding methods of feminist historiography beyond content analysis to include flexible methods, including interviews and oral histories, that complement global sites and contexts. Furthermore, TPC scholars must enlarge views of which histories are worthy of study and critique dominant narratives of women from Euro-western perspectives. The invisibility of international perspectives in feminist historiographies suggests that there is vital work to be done in reclaiming and documenting the global history of women in TPC.”

**Lyn Gattis**

### ***Problems and prospects in survey research***

Moy, P., & Murphy, J. (2016). *Journalism & Mass Communication Quarterly*, 93(1), 16–37. doi: 10.1177/1077699016631108

“Over the last few decades, survey research has witnessed a number of developments that have affected the quality of data that emerge using this methodology. Using the total survey error (TSE) approach as a point of departure, this article documents chronic challenges to data quality. With the aim of facilitating assessments of data quality, this article then turns to best practices in the disclosure of survey findings based on probability and nonprobability samples. Finally, (p)reviewing the use of technology and social media, it provides an overview of the opportunities and challenges for survey research today.”

**Lyn Gattis**

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## **Theory**

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### ***Moving technical communication off the grid***

Garrison, K. (2017). *Technical Communication Quarterly*, 27(3), 201–216. doi: 10.1080/10572252.2018.1483676

“This article argues for an ‘off the grid’ approach to thinking about technology and technical communication. First, the author presents a metatheory that connects numerous descriptive theories of technology into a unified approach to philosophizing about technology. Then, the author uses this unified approach to argue that the metaphor of off the grid living provides technical communicators with a way of rethinking our approach to pedagogy, user-centeredness, and the future of our field.”

**Rhonda Stanton**

## Writing

### ***Distributed writing as a lens for examining writing as embodied practice***

Clayson, A. (2018). *Technical Communication Quarterly* 27(3), 217–226. doi: 10.1080/10572252.2018.1479607

“The author argues for a reinvigorated focus on writing ‘as material, corporeal action’ and proposes a framework of ‘distributed writing’ through which to enact this focus. This framework highlights writing’s simultaneously material and embodied nature and can help scholars further examine and understand interactions among tools, artifacts, and writing bodies. Continuing to study writing ‘as material, corporeal action’ is necessary as 21st century tools for writing continue to change.”

**Rhonda Stanton**

### ***The narrative strategies of winners and losers: Analyzing annual reports of publicly traded corporations***

Laskin, A. (2018). *International Journal of Business Communication*, 55(3), 338–356. doi: 10.1177/2329488418780221

“This study focuses on the narrative strategies corporations utilize to communicate their annual results to investors and the financial community. Specifically, the study looks at the sample of overperforming and underperforming companies and analyzes how management shapes their performance results using a variety of narrative strategies in their annual reports. The study uses DICTION software in order to perform a computerized content analysis of annual reports of a purposive sample of Standard & Poor’s 500 corporations and identify and compare the usage of the 35 narrative strategies.”

**Katherine Wertz**

### ***Tools matter: Mediated writing activity in alternative digital environments***

Ching, K. L. (2018). *Written Communication*, 35(3), 344–375. doi: 10.1177/0741088318773741

Though set as a piece about teaching writing, this article is thought-provoking for all professional writers, as it examines how we are affected by the technology we use, especially how technology may distract and/or motivate us. “This study examines the experiences and perceptions of writers who composed text using ‘distraction-free’ writing tools that stand as alternatives to standard word processing programs. The purpose of this research was to develop a clearer understanding of how digital writing tools may shape the activities and practices of writers, as well as what writing with unfamiliar tools and technologies might reveal about writing processes. Analysis of study participants’ reflective narratives of their composing experience suggests the extent to which writing tools and technologies influence routine practices, assist writers as they try to direct their attention (and avoid distraction), motivate writing, and impact writers’ ‘text sense’ as they compose. Moreover, findings indicate how different tools and technologies may be viewed as more or less useful for different writing tasks. This article ends with a call for writing researchers, writing teachers, and software developers to attend more critically to the ways writing technologies shape the practices of writers.”

**Diana Fox Bentele**